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AN EXPLORATORY INVESTIGATION OF PROBLEMS, BARRIERS, AND CRITICAL FACTORS TO INITIATING AND MAINTAINING ABSTINENCE OF INDIVIDUALS WITH HISTORIES OF COCAINE RELATED PROBLEMS

by

LUCRETIA A. BOLIN

DISSERTATION

Submitted in partial satisfaction of the requirements for the degree of

DOCTOR OF NURSING SCIENCE

in the

GRADUATE DIVISION

of the

UNIVERSITY OF CALIFORNIA

San Francisco

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Dedication

In loving memory of my grandmother whose pains, hopes and dreams where not in vain. In the still of the night I fear not for I am not alone in my journey. Your spirit comforts a weary heart.

Acknowledgements

There are so many individuals to whom I owe a gracious thanks. You see, for me, the attainment of this goal symbolizes not only an individual struggle but a collective struggle to have a voice which can both be heard and acknowledged. It is the culmination of the work of numerous giving and courageous people, some living, some dead but whose contributions, whether big or small, were invaluable. To Lisa who not only accompanied me but comforted me on this journey. Your presence is like a guiding light showing me the way through self doubt and fear, and leading me to a place of true self love. You are a dear friend. I love you and thanks. To DeLois Weekes, Nanny Greene and Victoria Moreno to whom I looked for inspiration and direction and who gave me so much more. Thank you. I would like to extend a deep and sincere thank you to all of those people who prayed for me and believed in me. You are too numerous to name but I know the value of your words, faith, love and friendship. I would like to especially thank my valued committee members, doctors Patricia Underwood, Kay Fillmore and Bob Newcomer. Finally I would like to thank those participants who gave freely of their energies especially the friends of Bill Wilson without whose help I could not have achieved this goal. Finally, all praise be to God.

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Abstract AN EXPLORATORY INVESTIGATION OF PROBLEMS, BARRIERS, AND CRITICAL FACTORS TO INITIATING AND MAINTAINING ABSTINENCE OF INDIVIDUAL WITH HISTORIES OF COCAINE RELATED PROBLEMS

Lucretia A. Bolin R.N., M.S.N., D.N.S.

University of California, San Francisco, 1992

Little is known about the recovery related experiences of African Americans, in particular, the abstinence related experiences. Disparities between African Americans and Euro-Americans are pervasive. Disparities may exist across a multitude of contexts, one of which may be substance abuse recovery and the associated abstinence related experiences. However, treatment modalities are based on Euro-American values systems which may be ineffective or inappropriate in addressing the needs of recovering African Americans.

This exploratory investigation examined commonalties and/or differences across three specific areas: critical factors for initiating abstinence, identified problems and barriers, and critical factors for maintaining abstinence. Thirty nine currently abstinent individuals with histories of cocaine related problems participated in indepth interviews. The interview data were analyzed through interpretive narrative analysis. Interpretive narrative analysis reveals gualitative similarities and common critical factors that move participants towards abstinence. Overall the sample profiles a group of people with poly-substance abuse, histories of both familial and adolescent substance abuse, preferential use of crack for African Americans or cocaine with heroin for Euro-Americans and less than a year abstinent. Common critical factors for initiating abstinence include threat of loss/separation and despair and distress. Conditions and/or critical factors for maintaining abstinence include positive social support, avoidance of associational cues, and cost benefit analysis. Problems and barriers identified in the investigation include overwhelming emotions, lack of social support/ negative social support, associational cues such as people, places, and things. There were no significant statistical findings from this study. In conclusion, the implications for further research and practice suggest a second study exploring the dimensions of the concept of substantial representation of color and its' relationship to social support and recovery. In addition, four hypotheses are derived suggesting avenues for further study.

1. Critical factors for initiating abstinence for women are different than those for men.

2. Children are significant factors in a woman's decision to initiate abstinence.

3. African Americans are more likely to discuss issues of race and racism in the confines of 12 step mutual support groups if other visible minorities are presents.

4. Substantial representation of color (i.e., the proportion of like visible racial and ethnic minorities present) is crucial to the disclosure of racially sensitive issues in interracial settings.

Fatricia R. Underwood

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Critical Factors

Chapter 1. Introduction The Problem

Substance abuse and addiction are major social health problems with substantial implications for all involved. Vulnerable aggregates of the population are particularly susceptible to the pernicious effects of substance abuse and dependence. In particular, the problems of the African American community are compounded by the effects of substance abuse. Much has been written about the incidence of alcohol and drug-related problems in urban African American communities. Research gaps exist concerning the African American recovery experience from substance abuse. Little research exists regarding the barriers that recovering African Americans encounter.

Drug abuse has reached epidemic proportions throughout the United States. The crisis (Gross, 1988) is particularly evident in African American communities in major metropolitan areas. Alarming statistics (Fullilove and Fullilove, 1989) regarding the birth of infants with cocaine related problems, the rise in crime and violent deaths, and the increase in human immunodeficiency virus (HIV) seropositivity bear witness to the destructive potential of substance abuse problems not only in the general population, but particularly in the lives of African Americans.

There is a dearth of literature regarding the African American recovery experience (Harper, 1979). Amaro, Beckman and May (1987) assert that sociocultural factors that contribute to the development and experience of substance abuse problems among African Americans may differ substantially from those of [Euro-Americans. Some researchers (Ziter, 1987) have postulated that recovery for the African American is contextually different than that for his or her Euro-American counterpart. Virtually "no systematic research has been conducted to investigate the influence of socio-cultural factors and the effect of these factors on treatment" and recovery (p. 227). Treatment and intervention strategies are often based on Euro-American value systems, negating the historical and sociopolitical influences of institutionalized racism and oppression as both causative factors in the acquisition of substance abuse problems and barriers to long-term abstinence and recovery (Dawkins, 1988; Primm & Wesley, 1986). Sound methodological research addressing the recovery experiences of African Americans is necessary to generate sensible policy, prevention, education, and strategies that minimize or ameliorate the impact of substance abuse problems on the African American community. This information would help to identify those strategies that best meet the needs of the recovering African American substance abuser, facilitate the construction of culturally sensitive programs, and add a substantial amount of valuable data to the existing scholarly literature.

Purpose of the Investigation

The purpose of this investigation is (a) to explore the recovery experiences of individuals with histories of cocaine related problems, with a primary focus on the recovery experience as perceived by African Americans, as they compare with Euro-Americans, and (b) to examine perceived critical factors and barriers that may influence initiation and/or maintenance of abstinence.

Significance of the Problem

The African American recovery experience is significant for at least two

reasons: (a) the acquisition of substance abuse problems and the recovery experience are believed to be contextually and experientially different from those of Euro-Americans, and (b) treatment modalities and strategies based on Euro-American value systems may be ineffective or less effective for African Americans. We do not know what is significant in the abstinence-related experiences of African Americans as compared to Euro-Americans. This research is significant because we know very little about patterns of abstinence, patterns of recovery and critical factors for African Americans. Yet, treatment modalities have been criticized for not recognizing the potential racial/ethnic differences that may impact outcomes of interest. Furthermore, this research is important for the practice of nursing because we recognize that health and its related components are complex phenomena and that humans are more than the sum of their parts. Sound nursing practice stems from sound methodological research that attempts to understand the nature of human existence. The practice and the science of nursing is concerned with human response to a variety of conditions and how those responses impact and shape individual and collective health status and practice.

Critical Factors

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Chapter 2. Overview of the Relevant Literature Confounding the Issues:

This section provides an overview of the current issues in the field of substance abuse. There is a lack of clear and concise definitions of phenomena of interest. The fields of substance abuse and dependence suffer from conceptual ambiguity, conceptual crises, and confusion. Shaffer (1986) attributes this conceptual ambiguity to competing theories, ambiguous definitions of dependency, substance abuse, relapse, and recovery, and polarized explanations for the occurrence of substance abuse problems.

Substance abuse, as conceptualized here, is a cognitively mediated behavioral process. That process progresses along a continuum (i.e., initiation, continuation, transition, abuse, and dependence). This continuum is marked by changes in both cognition and behavior.

Substance dependence is not a unitary phenomenon but the result of a multiplicative interaction between genetics and social psychological variables. There is little consensus as to who is an addict or an alcoholic and what criteria best describes substance dependence and abuse. The newly revised Diagnostic and Statistical manual (DSM III-R) of the American Psychological Association attempts to refine past definitions of substance dependence by bridging United States definitions and criteria with international criteria of the World Health Organization (WHO). Only three of the following DSM III-R criteria must be present for a diagnosis of substance dependence are :

1. substances taken in increasing amounts over longer periods of time than

anticipated by the user.

2. persistent attempts to stop, decrease, or control use without success.

3. the need for increasing amounts of the substance to achieve the desired effects or decreased desired effects with persistent use of the same amounts of the substance.

4. substances taken to alleviate physiological and/or psychological symptoms that occur with cessation.

5. abstinence symptomatology with decreased use or cessation.

The following criteria are indicative of probable dependence:

6. excessive amounts of time spent in activities to procure the drug or to recover from its effects.

7. frequent social, occupational, or academic dysfunction secondary to excessive use, frequent intoxication, or withdrawal symptoms.

8. important social, occupational, and/or recreational activities given up because of substance use.

9. continued use in the face of social - psychological and physical dysfunction (American Psychiatric Association, 1987, p. 168).

This investigation attempts to avoid the confusion surrounding terminology and definitions by (a) attempting to avoid terms like addiction, abuse and dependence except where necessary to maintain the consistency of quotes, and (b) utilizing the term *cocaine related problems* when discussing cocaine dependence and abuse.

Cocaine related problems encompass those problems that are associated with excessive cocaine use, cocaine abuse and/or cocaine dependence. Cocaine

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related problems may include interpersonal difficulties and conflicts, employment related problems, legal difficulties, financial difficulties, and health related disabilities and dysfunction. Cocaine related problems ensue because of an inability to discontinue or decrease use when use begins to interfere with the user's existence, and may require outside intervention. The use of the term cocaine related problems avoids the difficulty inherent in defining terms like abuse and dependence, and allows for identification or diagnosis of a variety of substance related problems regardless of when they may occur along the continuum. Issues of dependence and addiction continue to be points of contention for those who adhere to the disease concept.

<u>Treatment, Post - treatment, and Recovery</u>

There is a lack of clear, concise boundaries leading to a lack of specificity in terms. This section attempts to organize what is known about treatment, post - treatment, and recovery. There is, unfortunately, a significant overlap.

Definitions of recovery have been clouded by definitions of treatment success. Since treatment is intricately tied to the concept of recovery, recovery is typically couched in the language of treatment outcomes. Investigators link discussions of recovery to exposition on the effectiveness of treatment (McAuliffe & Ch'ien, 1986; Wermuth, Brumett & Sorensen, 1987). Treatment is thought to facilitate recovery and lead to client improvement. Research on the utility of treatment supports the notion that some treatment is better than none (Ito, Donovan & Hall, 1988). Debate rages regarding what criteria are indicative of improvement. Is a decrease in drug and alcohol use from previous levels evidence of successful treatment, is complete abstinence a necessity for treatment

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to be deemed effective or must treatment also guarantee improvements in other areas ?

Treatment

It is impossible, given the goals and aims of this investigation, to review all of the available literature on the topic of substance related problems. This literature attempts to organize this discussion by exploring treatment, post treatment, and recovery. The literature on treatment is voluminous and inconclusive (Burke, 1984; Chapman and Huygens, 1986; Clark, 1986; Cronkite and Moos, 1980; Ito et al. 1988; Mclatchie and Lomp, 1988; Miller and Hester, 1980; Sobell and Sobell, 1978; Svanuum and McAdoo, 1989; Valliant, 1985). Svanuum and McAdoo (1989) found that:

> For most people who receive treatment for [substance abuse and dependence] the course of recovery will be unstable. Over a 4-year period following treatment, approximately 90% will experience some degree of relapse, and the majority of treated persons will be using mood altering chemicals. Even over shorter periods of time, great variability in outcome status is observed. Few treated persons show a stable pattern of failure, and fewer still show a long-term pattern of stable recovery. (p. 222)

Treatment may encompass a broad range of interventions and services designed to assist individuals in altering, if not discontinuing, destructive patterns of substance use. Treatment goals ascribe to an ideal state of substancefree living, social responsibility, and productivity. Most individuals who voluntarily present for treatment may have tried numerous methods of control.

Abstinence is often the goal of such treatment. The general public expects that individuals will show improvements in other areas of functioning. Some theorists and researchers propose that abstinence is not necessarily the only viable goal (Fillmore, 1990 in conversation; Hall, Havassy & Wasserman, 1990, 1991). In fact, some investigators consider a reduction in substance use and a decrease in related problems to be evidence of treatment effectiveness. Treatment may be directed towards reducing problematic substance use as in the the use of methadone. However, some theorists claim that the more an individual's history reveals past failures at moderation, the more likely abstinence becomes the only viable option of treatment (Valliant, 1985). This investigation is primarily concerned with the goal of abstinence.

The implicit and shared assumption is that treatment is essential and necessary. This assumption supports continued research which is focused on treatment rather than the phenomenon of recovery. No doubt this focus has been influenced by the immediacy of the substance abuse and dependence epidemic and the related problems. It is accepted that, if untreated, substance abuse and dependence leads to grave dysfunction, adverse health consequences, morbidity, and mortality. However, little is known about treatment outcome and even less is known about what happens to individuals post -treatment. Chapman and Huygens (1988) found no significant differences between three treatment approaches on the outcome criteria of abstinence and generalized improvement at 6 and 18 months post - treatment. Overall, treatments did contribute to a decrease in quantity of the substance consumed in those who continued to use

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the substance post - treatment. Other findings reveal a changing pattern of influences on outcome (Valliant, 1985) at 6 months and 18 months postintervention. More specifically, in a regression, model relapse was best explained by predictor variables of age, prior abstinence, family background, and pretreatment use of analgesics. However, the same factors were not the best predictor of substance use behavior at 18 months. Chapman and Huygens (1988) noted that "overall, there was no robust impact from any treatment" (p. 74). Subjects in the study who successfully abstained, that is had no alcohol or drug use, appeared to have less evidence of dysfunction in other areas of their lives at 6 and 18 months post - treatment. This finding offers some support for other studies (McLellan et al. 1982) that have documented that treatment has pervasive effects not only on alcohol and drug consumption but on other areas of human existence. The design of the Chapman and Huygens (1988) study is statistically robust and the conceptual arguments are clear and concise. The major limitations relate to the sample size, inherent lack of generalizability, and the inability to account for alternative influences that may have prevented the finding of significant results across the three treatments.

For those individuals who progress to abusive or dependent patterns of substance use, especially cocaine use, intervention in the form of treatment may be necessary. Treatment may assist in the initiation of abstinence or in the reduction of substance use. This review of literature does not differentiate between substances in regards to treatment. It is acknowledged and accepted that different substances have different mechanisms of action and have necessarily different patterns of use and potential for abuse and dependence.

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Critics argue that, overall, treatment for substance abuse and dependence is minimally effective. Valliant's landmark study of the nature of alcoholism over a 40- year period revealed that treatment experiences did not necessarily differentiate between abstinent and non-abstinent respondents. The importance of Valliant's work is its longitudinal methodology and follow-up which the majority of studies do not enjoy. More importantly, his work places treatment in the context of acute care, pointing out that over the course of time the impact of treatment diminishes and other more peripheral factors mediate the maintenance of abstinence. Valliant called these peripheral influences non treatment factors.

A large number of studies focus on treatment outcome. Investigators have attempted to find answers to such questions as: (a) does treatment result in improvement and can this improvement be attributed to the treatment interventions? (b) is improvement limited only to drug and/or alcohol intake, or is improvement pervasive over the individual's sphere of existence? McLellan, Luborsky, O'Brien, Woody and Druly (1982) attempted to determine the effectiveness of treatment. Subjects were administered the addiction severity index (ASI), which assesses problem severity in several dimensions and severity of drug and alcohol use. The ASI was re-administered at 6 months follow-up, at which time a t-test revealed a decrease in in ASI scores across the sample, supporting a general trend towards improvement. Alcohol scores at admission were 38.4 versus 16 at 6 months post - treatment (p < .01). Drug use scores averaged 27.2 and 5.8 at admission and at the 6 month follow -up (p < .01). Overall, improvement at 6 months appeared to be pervasive as measured by

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scores on the other dimensions of the ASI. This study is significant in its attempt to move beyond a simplistic outcome measure of abstinence. However, the use of the ASI, a new tool, must be further refined with larger samples. This investigation would have benefited from a second data collection point at perhaps 18 months. Multiple measurement points can reveal patterns that may not be so obvious with the collection of data at only one point in time.

Researchers propose that although important, treatment has no direct effects on post - treatment outcome and behavior. More importantly, the effects of treatment on post - treatment behavior and outcome may account for less of the explanatory variance over the course of time. A significant gap in our understanding of [substance abuse and dependence] begins at the point at which the [individual's] treatment ends. The nature and determinants of the [substance dependent person's] post - treatment functioning are unexplored. Basic and clinical research has examined the etiology, progression and treatment of [substance dependence] more extensively than the interdependent process of recovery that continues after the termination of treatment (Billings and Moos, 1983).

On the whole, treatment for substance-related problems has been equivocal. This is explained by the lack of adequate sample sizes, poor outcome operationalization, use of non - standardized tools for data collection, and a lack of longitudinal studies or multiple data collection points. Asking the questions whether treatment works is a faulty question because it (a) is too ambiguous (i.e., what kinds of treatments work for what kinds of substances, and for what kinds of individuals?), (b) implies that substance abuse, dependence, and

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substance-related problems are a unitary phenomenon, and (c) accepts a limited criterion of success (i.e., what does the word "work" imply?) (Institute of Medicine, 1990).

<u>Post - treatment</u>

Valliant's (1985) landmark longitudinal study of alcoholism covering 40 years reveals that treatment alone is insignificant in predicting long-term outcome. What is significant is the influence of post - treatment factors that may have more predictive validity as the impact of treatment diminishes over time. Other investigators (Chapman and Huygens,1985; Westermeyer, 1989) cite evidence that non - treatment factors play a significant and influential role in long-term outcome. According to McLellan et al. (1982) "it is comparatively easy to eliminate . . . acute signs of [client's] psychobiological tolerance. It is much more difficult to sustain that condition through improvements in the constellation of associated symptoms" (p. 1928). This calls into question the longitudinal impact of treatment.

Cronkite and Moos (1980) examined the influence of three sets (i.e., pretreatment, treatment and post - treatment factors) of variables on outcome at 2 years post - treatment. Utilizing path analysis, the investigators contended that post - treatment factors such as coping and stressors had a significant impact on outcome. More stressors post - treatment where related to greater levels of alcohol consumption (p < .05) and greater levels of depression (p < .01). Treatment and social background, however, had no direct effect on abstinence, occupational functioning and depression at 2 years post - treatment.

Billings and Moos (1983) examined the psychosocial processes of recovery

among alcoholics. Recovery was conceptualized as either abstinence or a reduction in drinking without associated problems, improvement in personal and occupational functioning, and participation in social activity. The study examined recovering and relapsed alcoholics. The general trend was that the recovering group demonstrated better adjustment, occupational functioning, and social functioning than those in the relapsed group. Even more important for the purposes of this investigation was that those individuals in the relapsed groups reported more negative life events, greater levels of depression, greater perceived family environment conflict, and fewer perceived coping and social resources to buffer stress in the family and community environment. This is significant because one can argue that the lives of many urban African Americans may be characterized by greater problems severity, stress and environmental conflict.

Finney, Moos and Mewborn (1980) examined, using a multiple regression model, post - treatment experiences on treatment outcome (N = 113). There was some support that abstinence at 6 months post - treatment was related to depression, social and occupational functioning, and the presence of physical symptoms. Post - treatment factors were conceptualized as family environment (i.e., measured by the Family Environment Scale), 12-step program participation, individual therapy, life change events, work environment, and family functioning were individually related to some outcome measures at the 6 month follow-up. A positive family environment was related to better functioning in all areas at 6 months. More family disagreement and conflict was related to increased depression at 6 months follow-up. Negative life events were related to

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alcohol consumption at 6 months. A multiple regression model incorporating post - treatment factors explained more of the variance on outcome measures than did background and intake factors alone. Longitudinal evaluation (i.e., 2 years post - treatment) of post - treatment experiences on the outcomes followed a pattern similar to those at 6 months. However, the magnitude of the relationships was lower than anticipated at the 2-year follow-up. The stability of predicative factors over the course of time may therefore change. However, we must begin to look to other aspects of the individuals' life to determine what factors, if any, are important in determining long term abstinence and/or lapse and relapse.

Hall, Havassy and Wasserman (1991) examined commitment to abstinence, positive mood states, stress, and coping in relationship to relapse to cocaine (N =104). Race was an important covariate: African Americans in the study were at a greater risk for relapse because the majority of them were users of crack or freebase cocaine (p = .0734 at 12 weeks, p = .0033 at 6 months). Route of administration of cocaine, was also an important covariate. Intranasal users were less likely to relapse at both 12 weeks and 6 months in comparison to freebasers or crack users. This study did not find support for a prospective relationship of stress to relapse. Perhaps, the conceptualization of stress as acute impeded the finding of significant results. Chronic stress and its manifestations may best characterize the lives of some African Americans. In a related study, Hall, Havassy and Wasserman (1990) found that relapse was related to youth, race, employment, marital status, and education. A third study by the same investigators proposed that social support, a critical factor in outcome, may be

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experienced differently for African Americans than Euro-Americans.

Recovery

Two of the critical issues regarding the definition and conceptualization of recovery pertains to process or outcome, and the distinction between the two. There is a dearth of empirical-based literature on the process of recovery (Kurtines, Ball & Wood, 1978; Moos, Finney & Chan, 1981; Moos, Finney & Gamble, 1982; Wiseman, 1981; Mulford, 1977; Gerard, Saenger & Wile 1962; Billings and Moos, 1983). Critics argue that recovery is a time-dependent process which is characterized by specific stages (Mulford, 1977). There are differential patterns of adjustment over time in the recovery process (Kurtines et al. 1978). These patterns of adjustment are influenced by non - treatment factors. Kurtines et al. (1978) examined personality factors of alcoholics in two stages. The two groups had significantly different scores on the California Personality inventory and on measures of intrapersonal and interpersonal functioning. Overall, personality profiles of the long-term recovering group (i.e, > 4 years) differed significantly from that of the newly recovered group (i.e., 3 weeks to 4 months) and the non - alcoholic control group. Non - treatment factors have a significant impact on the maintenance of abstinence and the recovery process (Valliant, 1985). Others concur that non-treatment factors exert a significant influence on the maintenance of abstinence (Westermeyer, 1989).

According to Tomoko (1988) "the concept of recovery as it applies to [substance abuse and dependence] began as a very narrow concept of abstinence and slowly evolved into a multidimensional concept" (p. 140). To conceptualize recovery as abstinence is a very simplistic view of a dynamic, interactive

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phenomenon (Mulford, 1977; Marlatt and Gordon, 1985; Valliant, 1985). Gerard et al. (1962) advanced the study of the concept of recovery in a landmark paper entitled "The Abstinent Alcoholic." Other researchers (Cronkite & Moos, 1980; Finney et al. 1980; Billings and Moos, 1983), have also contributed to the study of the process of recovery, moving away from past descriptions of the phenomenon to complex, interactive frameworks.

According to Banonis (1989), recovery is a process of change whereby new patterns of interaction are co - created that are reflected "in the [substance abusive or substance dependent person's] view of the self the substance and the environment" (p. 37).

Studies that focus on post - treatment experiences and recovery may provide insight into those factors that may explain variations in outcome across different samples. In particular, the previous studies suggest that family and work environment, family, and social functioning, negative life change events, and positive social support at home, work and in the community, and perhaps method of administration may contribute, in varying degrees, to short-and longterm abstinence, the occurrence of depression, improved social functioning and the presence of physical symptoms, lapse, and relapse. These findings are significant for the study of recovery experiences for African Americans. We know very little about the process of recovery, and know even less about racial/ethnic patterns of recovery and how these patterns diverge or converge with dominant cultural patterns.

What is Known About Treatment and Post - treatment.

1. No single approach to treatment has been proven more effective. However,

2. Abstinence, although a very limited criterion of treatment success and or recovery, may facilitate improvement in other life areas that in turn may impact on continued abstinence.

3. In naturally occurring, untreated populations, there may be a continuum of outcomes that do not ascribe to abstinence.

4. What may be most significant in predicting long-term outcome may not be treatment per se but the interaction of post - treatment, extra- treatment and non treatment factors, such as, life events, stressors, coping, family support, and employment. Greater problem severity along with conditions of chronic stress may represent significant problems, barriers and impediments to initiating and/or maintaining abstinence. Over the course of time these factors may account for significantly more of the explanatory variance in variations in post - treatment outcome and behavior than treatment per se.

5. Treatment is a component of the recovery process.

Documenting Disparities in Health: Race as a Predictor

A major focus of this investigation is the influence of race/ethnicity on the process of recovery. Crucial to this discussion is an examination of (a) the history of African Americans in North American; (b) disparities in health, both past and present; (c) patterns of substance abuse, in particular, changing trends in substance preferences; and (d) causative factors and influences in substance related problems for African Americans. Current terminology recognizes the usage of African American versus the term black to describe individuals evolved from the race of African peoples. For purposes of consistency African Americans ι.

will be employed in the study unless the use of a quote employs the term black. African American excludes those individuals of Hispanic origin. The term Euro -American is employed to define those individuals that identify as white and Caucasian. For the purpose of this study Euro - Americans are those individuals who were born and reared in North America and descended from a variety of ethnic groups (i.e., English, French, German, and Swedish). In a racially stratified society such as that of North America, Euro - Americans are recognized as the dominant racial group. It is important to note that race alone cannot fully capture the totality of the phenomenon. Race, for the purpose of this study, includes ethnicity, which embodies culture, values and identity. Race, and its components, is deemed an important influence on substance abuse, dependence, behavior and recovery.

Literature has documented the troubling disparity between African Americans and Euro - Americans regarding morbidity, mortality, and health status (Ewbank, 1987; Manton, Patrick and Johnson, 1987; Department of Health Services California, 1986). These health differentials have been examined with respect to a multitude of socio - political and economic factors that have their basis in the historical roles and experiences of African Americans in North America (Primm, Cook &Drew, 1981; Primm and Wesley, 1985).

To understand the contemporary status of African Americans, one needs to examine the historical context of African Americans in North America. Contemporary perceptions and beliefs are embedded in the historical matrix of slavery, providing the basis for understanding the past and present status of African Americans (Woodard, 1974). The experience of African Americans documents a bitter and violent struggle from the slave trade to the civil rights movement. This struggle is evidenced by the differential health outcome and trends in a higher prevalence of morbidity and mortality among African Americans. Slavery, a system of labor based on race for profit, gave African Americans a unique history and set the foundation for a struggle on all fronts, particularly (a) political rights, education, employment, civil rights, and health.

Racial prejudices are directly tied to the past and current status of African Americans. Slavery subjected African Americans to extreme cruelty, inhumanity, degradation, and humiliation. Slaves had no civil rights, political rights, or claims to freedom or movement. Although the thirteenth amendment brought an end to the institution of slavery, prejudicial sentiments would continue to enslave and dehumanize African Americans.

African Americans were forced, because of economic disenfranchisement and lack of opportunity, to maintain ties with their masters for employment and survival. This factor made it easier for southern whites to reestablish a system of oppression. Following World War I, African Americans migrated in large numbers to northern industrial areas hoping for opportunities for economic advancement. Ewbank (1987) explains that African Americans in most states occupied lower income categories in the late 19th century and early 20th century. Conditions of housing, unemployment and education remained inferior to those of Euro - Americans. African Americans lived in crowded housing, and in extreme poverty. These lower living standards and conditions, along with greater exposure to pernicious conditions, poor and inadequate health care, and heavier labor, resulted in shorter life expectancies and higher mortality (Stamp,

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1956). When infant mortality statistics were included, life expectancy differentials between Euro - Americans and African Americans widened considerably. Race and economic status appeared to be significant factors in the noted disparities in health in the 19th century (Preston, Haines and Pamuk, 1981).

Race has been postulated as a factor in a number of studies. Literature examining differences in psychological distress has helped to advance not only the methodology involved in examining race but also the understanding of concepts like race and ethnicity. Although some studies (Warheit, Holzer and Schwab, 1973) have found no significant differences between Euro - Americans and African Americans, others (Kessler and Neighbors, 1986) attribute this to inadequate methodological approaches, and concept operationalization. There is good reason to believe that an index of socio - economic status does not fully capture the stresses to which African Americans are more highly exposed than Euro - Americans. Yet the data are unequivocal in showing that there is no effect of race on psychological distress once socio -economic differences between races are taken into consideration. Kessler and Neighbors (1986) maintain that an interactive relationship best captures the true relationship between race/ethnicity, socioeconomic status, and psychological distress. This finding encourages researchers to move beyond simple linear models and is important in the study of race/ethnicity in explaining other noted disparities, in particular, patterns of substance use and possibly variations in long-term outcome.

Since 1930, there have been dramatic and impressive changes in the relationships between African Americans and Euro - Americans. Although there have been improvements in terms of education, civil rights, infant mortality, life

expectancy, and access to health care, some of the vestiges of racial slavery continue to exist. "One of three [African Americans] still live in households with incomes below the poverty line. Even more [African Americans] live in areas where ineffective schools, high rates of dependence on public assistance, severe problems of crime and drug abuse and low and declining employment prevail" (Jaynes and Williams, 1989, p. 3). Weekly and hourly wages have increased, and unemployment has increased as well. Educational statistics show similar discrepancies. The high school drop out rate for African Americans is twice that of Euro - Americans (Jaynes and Williams, 1989, p. 21).

Bowser (1988) describes an ethnographic study of one predominantly African American community in San Francisco that is thought to be representative of other African American communities throughout the United States. Bayview Hunter's Point is isolated, characterized by high unemployment, overly represented by lower socio - economic status, and has a predominance of youth. Bowser notes, "In virtually every comparative measure, Bayview Hunter's Point inequality relative to the rest of San Francisco is on the same scale as the inequality between [African Americans] nationally and the rest of the nation. Although industry is plentiful in the area, unemployment within the community is rampant" (p. 385). Bowser attributes this phenomenon to psychological depression among members of this African American community, social withdrawal, lack of organization, and community isolation. Cheung (1991) attributes the contemporary problems of African Americans to a lack of structural incorporation which is, accordingly, a function of racial discrimination, particularly for visible racial and ethnic minority groups. Racial discrimination

(i.e., racism) says Cheung, "has always denied [African Americans and other visible racial minorities] equal access to social, economic, and political institutions, thereby hampering their [participation] and structural incorporation into the larger society" (p. 593). The lack of structural incorporation blocks opportunities to succeed, achieve, and obtain legitimate goals that may foster extreme conditions of stress, learned helplessness, and depression on the individual and collective level. Persistent racial discrimination and actual disadvantaged conditions reinforce the current position of social marginality of African Americans today. One of the by- products of racial discrimination is continuing and persistent disparities in important indicators of living conditions, particularly in the areas of health, morbidity, and mortality.

The council on ethical and judicial affairs of the American Medical Association explains that the literature continues to document disparities in access to health care, income, and education between African Americans and Euro-Americans. Even when access to health care does not constitute a causative factor in the noted disparities, African Americans are "less likely than [Euro-Americans] to receive certain surgical or other therapies" (Council on Ethical and Judicial Affairs, 1990, p. 2344). This fact has been supported in studies examining treatment for renal disease, cardiovascular disease, and surgery for such problems (Ford, Cooper, Cartaner & Simmons, 1989; Maynard, Fischer, Passamani & Pullym, 1986). Literature documents differentials in health care access, utilization, risk factor exposure, chronic and acute morbidity, and mortality. Furthermore, there is evidence of disparities on many important social indicators (i.e., employment opportunities, unemployment rates, education, housing, socioeconomic status). One plausible explanation for these noted disparities across a wide variety of conditions is the existence of institutional racism reflecting the continued and persistent precarious relationships between African Americans and Euro-Americans.

Drug/Alcohol Use Among African Americans

Herd (1985) documents an alarming disparity between rates of cirrhosis for African Americans versus Euro - Americans. In cities with large African American populations, this group accounts for approximately half of the deaths related to cirrhosis. Historical trends reveal that this pattern represents a dramatic shift from past indices of alcohol use. In the early 19th and 20th century cultural norms, values, and rules aligned more with prohibitionist views on alcohol use. African Americans drank proportionately less than Euro-Americans.

Mass migration of African Americans to northern industrial states where the social milieu was dominated by speakeasies, nightclubs, and taverns, coupled with national campaigns for prohibition, seduced large numbers of African Americans into the liquor distribution industry. This industry, at the time, provided lucrative economic incentives for individuals who had limited means of earning other sources of income. Prohibitionist ideology also became more aligned with racist and segregationist ideology. At this point alcohol problems rose steadily in African American communities as cultural norms, values, and rules for alcohol use begin to shift (Herd, 1985).

Current statistics indicate that alcohol-related morbidity and mortality has, if anything, continued to rise, reflecting striking disparities in national trends between African Americans and Euro - Americans. Although surveys of alcohol

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use in the general population indicate that African Americans generally drink no more than Euro-Americans, "blacks in the general population experience alcoholrelated health problems to a greater extent than whites" (Lee, Mavis and Stoffelmayr, 1991, p. 20). Harper (1979) asserts that "as compared with [Euro-Americans], the consequences of [substance related problems for African Americans], seem to be more grave in terms of illness, homicides, police arrests, accidents and assaults" (p. 2). Lee et al. (1991) examined the specific types of socio-cultural problems that may contribute to the higher occurrence of alcoholrelated health problems in African American communities. In particular, employment problems and use of other commonly abused substances appear to contribute to the noted disparity. Employment problems reflect potential for employment, employment status, appropriate education and training. In essence, African Americans with alcohol and drug-related problems are less likely to be employed because they lack much-needed education and training, thus diminishing their potential for gainful employment. These factors may have an impact on an individual's decision to seek health care. He or she may choose to wait longer in the course of their health deviation before seeking care resulting in greater problems severity.

Changing trends in drug preference patterns among African Americans have also been documented (Harlow, 1990). Bell (1990) asserts that ambiguous, illdefined norms and cultural rules regarding appropriate substance use can also account, in part, for changing patterns of substance use in African American communities. This assertion could also include the lack of clear community or family system accountability, and the lack of adequate methods and resources to

a. ...

buffer perceived stress. This shift is heralded by a rise in cocaine related morbidity and mortality among African Americans. Accordingly, Harlow (19900 notes that the rise in cocaine-related mortality was statistically significant when compared to rates for either Euro - American or Hispanics in 1986 and 1987. It is assumed that this disparity is evidence of a shift towards cocaine use in some African American communities, and particularly the use of more volatile forms of cocaine like crack.

Primm and Wesley (1985) identify aggregate level factors that may contribute to the higher incidence of drug-and alcohol-related problems in some African American cohorts. These factors are: (a) a history of racism, which imparts a psychological handicap on African Americans; (b) poverty, unemployment, and a lack of career and job opportunities; (c) failure of law enforcement officials to eradicate drug trafficking in African American communities; (d) the allure and economic rewards for selling drugs; (e) powerlessness; (f) lifestyles and value systems that reject and devalue menial jobs; (g) social network influences and peer pressure; (h) frustration from continuing racism, discrimination, and rejection; and (i) high levels of stress at both the individual and community level. The effects of cocaine, the lucrative economic reward, and the above aggregate level factors may explain the rise in cocaine-related problems in African American communities. It is suggested that cocaine may help to mitigate and buffer perceived stress and powerlessness for some, and may provide lucrative economic incentives for others. The lives of African Americans may be characterized by the existence of more severe problems, more negative life events, and stressors such that treatment of drug

and alcohol problems does little to reduce a priori problem severity which in turn may negatively influence long-term outcome and the maintenance of abstinence. Abstinence may have little significance in predicting general improvement. More importantly, maintaining abstinence may require strategies to address peripheral issues of greater problem severity that may characterize the lives of some African Americans.

Cocaine

The substantative focus of this investigation is cocaine related problems. The current drug epidemic in North America is attributable to a rising pattern of cocaine use in the general population.

History

Cocaine has a documented history approximating 1500 years (Kleber, 1988). Sigmund Freud endorsed coca for the treatment of a wide variety of ailments, including but not limited to asthma, nervous exhaustion, hysteria, hypochondriasis, digestive disorders, alcoholism, and morphinism (Byck, 1974). Products containing cocaine were widely available to the general public (Figure 1).

Insert figure 1 about right here

Race played a pivotal role in the decline in cocaine use during the early 20th century. Cocaine became associated in the public's mind with color, crime, degradation, and racist ideology. "In the period of 1900 - 1920 the mass media wrote of cocanized blacks committing heinous crimes" (Petersen, 1977, p.

29). These sentiments, which capitalized on pervading fears and existing beliefs regarding the racial inferiority of African Americans, were responsible for legislation prohibiting the sale and use of cocaine (Musto, 1987; Petersen, 1977).

The availability of cocaine has increased dramatically over the past decade. Indirect methods of estimating the extent of cocaine use include tracking a) trends in cocaine confiscation, b) patterns, c) prevalence of use in the general population, and d) cocaine related emergencies. Tracking trends in the amount of cocaine confiscated by law enforcement agents provides an indirect measure of illicit cocaine use and follows the economic laws of supply and demand (Petersen, 1977). According to Kleber (1988) emergency room admissions associated with cocaine use have increased 3.5 times between 1976 and 1981. One reported consequence of increasing accessibility and prevalence of cocaine is an increase in the number of cocaine-related deaths since 1976. Treatment facilities have experienced a 500% increase in cocaine-related admissions and a 200% increase in cocaine-related deaths since 1975 (Gold, Dackis, Pottash, Extein & Washton,1986).

In the last three years more than 30,000 pounds of cocaine were confiscated,

Figure 1

Advertisement for product containing cocaine solution



in comparison to only 392 pounds in 1982. The total volume of cocaine seized in the Los Angeles area was roughly half of that seized in the Miami area (San Francisco Examiner, 1988). While these data are methodologically limited they do provide a crude index of cocaine use in North America.

Cocaine in its processed form resembles white flakes and has the consistency of a powder. Cocaine can be injected, smoked, or inhaled. Nasal inhalation (i.e., snorting) has been the most common method of administration. This pattern may have changed with the advent of crack cocaine. Crack or freebase cocaine involves mixing the powder with a basic substance to yield a highly volatile and toxic form of the drug. Freebase, for purposes of clarification, is a method of cocaine use in which the vaporized cocaine is inhaled. Freebase, as a delivery system results in almost immediate effects. Crack is similar to freebase as a delivery system. Peak plasma levels are attained in approximately 30 minutes with intranasal administration and almost immediately with smoking or injection. The user often reports an intense rush or orgasmic sensation, which is strong reinforcement for continued use.

The effects of cocaine use include euphoria, increased energy, alertness, perceived sense of control, and self-confidence (Daigle, Clark and Landry, 1988). Cocaine alters and mediates neurotransmitter systems in the brain. It is hypothesized that cocaine acts on the reward pathways of the brain. Studies of the behavioral effects of cocaine demonstrate that (a) cocaine can be administered under a wide range of environmental conditions, (b) the method of administration is not particularly meaningful, although peak plasma levels are attained much more quickly with smoking or injection, and (c) the drug is a

potent and powerful reinforcer in all of the animal models studied (Fischman, 1988). Finally, cocaine seems to induce compulsive self-administration, which may lead to organ system toxicity. Toxicity may occur by any route of administration (Bates, 1988).

Prevalence and Trends of Cocaine Use

Over 22 million individuals in the United States have used cocaine (Clayton, 1988; Gold et al. 1986); 5,000 persons per day use it for the first time (Gold et al. 1986). Between 4 and 6 million individuals report regular use, and the total number of cocaine- dependent individuals is estimated at 2 million (Resnick and Resnick, 1984).

Gold, Washton, Dackis & Chatlos (1985) provided profiles of the general population of cocaine users calling an 800 - cocaine help line. In a random sample (N=500), the callers were primarily men (95%) who averaged 30 years of age and 14.1 years of education; over half reported incomes below \$25,000 per year. The primary method of administration was intranasal (61%). A major limitation of the Gold et al. (1985) sample is that of non-representativeness. A second survey (N=200) revealed an increase in the number of women in the sample and a shift towards freebase as a method of administration.

Correlates of Cocaine Use

Abelson and Miller (1985) analyzed data from a decade of National Household surveys (1972 - 1982). Three important correlates of cocaine use were identified from the data: (a) geographic location is correlated with prevalence of use, i.e., western and northeastern states report higher prevalence rates; (b) there is a greater prevalence of use in the metropolitan areas versus rural areas (i.e., greater population density is correlated with higher prevalence rates; and (c) use is heavily concentrated in the young adult cohort (i.e., 18 - 25 years of age), with 6.8% of them reporting use and greater lifetime prevalence of cocaine. Another correlate of cocaine use includes earlier marijuana use. In fact, Adams Gfrorer, Rouse and Kozel (1987) argue that "at least 93% [of cocaine users] had marijuana first" (p. 57).

The profile of the cocaine abusing and dependent populations may have changed recently because of the advent of crack cocaine. Crack which is highly potent and inexpensive, has made cocaine available to a young, and poor population that includes a substantial number of racial and ethnic minorities, in particular African Americans.

African Americans and Cocaine

Historically, the use of cocaine by African Americans paralleled that of the general population in the late 19th and early 20th centuries. As noted previously, cocaine was used in a wide variety of tonics and elixirs. For an indepth review the reader is encouraged to refer to Byck (1974) "The Cocaine Papers" and/or Musto (1987) "The American Disease: Origins of Narcotic Control." Legislation prohibiting both the sale and use of cocaine made it virtually inaccessible to but a few until the advent of crack cocaine. Cocaine-related problems disproportionately affect African Americans and are believed to impart more distress on the status of African Americans in this country. The lack of clear-cut rules of use and ambiguous norms regarding use, coupled with a perceived lack of traditional opportunities for achievement, entice members of some African American communities to cocaine use, sales and distribution.

Data from the National Household Survey (1988) provide prevalence and population estimates for cocaine use. Data were stratified by race, sex, age, and geographic region. In 1988 data on cocaine use by the African American population revealed that (a) 9.3% (2, 074,000) report ever using cocaine, (b) 4.4% (971,000) report cocaine use in the last year, and (c) 2% (447,000) report use cocaine use in the last month. Data on crack indicated that (a) 2.4% (543,000) of African Americans have used crack, (b) 1.0% (248,000) report crack use in the last year, and (c) 0.8% report crack use in the last month. Reports on frequency of use indicate that 4.4 % (971, 000) of African Americans have ever used cocaine, 1.9% (429,000) report using cocaine 12 or more times in the last year (i.e., 1987), and 1.1% (235, 000) report using cocaine once a week or more in the 1987. Other data revealed that (a) more African American men then women use cocaine and crack, and (b) use of both cocaine and crack is concentrated in the 26-34 year-old age cohort (93% C.I.). Although there has been some decline in cocaine use overall, African Americans are more likely to use crack cocaine than Euro -Americans. Trends in past month use of crack cocaine by race/ethnicity reveal that a greater percentage of African Americans report use of crack than either Hispanic or non Hispanic whites for years 1985, 1988 and 1990 (Office of Substance Abuse Prevention, 1991; National Household Survey on Drug Abuse, 1991). African Americans may be particularly vulnerable to escalation in cocaine use given the drug's effects, its accessibility in some communities, and the absence of cultural rules and norms regarding substance use in general (Murphy, Reinarman, & Waldorf 1989). Route of cocaine administration is related to lapse, as is family income (i.e., higher family income is related abstinence), and race

(Hall et al. 1991). In a study of relapse to cocaine, African Americans, the majority of whom were freebase/crack users were at a greater risk for relapse at 12 week and 6 months post treatment. The investigators report that "more frequent use of coping strategies was found to be a better predictor of abstinence for Caucasian subjects than for African-American subjects" (Hall et al. 1991, p. 531). Murphy et al. (1989) argue that the presence of network norms which reflect values for family and career offer protection against patterns of escalating cocaine use.

Linking Race, Stress, and Cocaine

One of the major recurrent stressors in the lives of African Americans is racism and its direct and indirect effects. Racism, organizational, institutional and individual, handicaps the lives of African Americans. It influences and shapes their life experiences over a variety of contexts. These experiences are different than those of their Euro-American counterparts as the literature documents. Documenting these experiential and perceptual differences requires one to delve into the individuals' experience and uncover the complexity of its context. In essence, this investigation recognizes that human behavior and the human experience does not occur in a vacuum.

The literature suggest that disparities between African Americans and Euro-Americans may exist in several areas and in a wide variety of contexts and experiences. One of these contexts may be treatment and the broader phenomenon of recovery. There is good reason to believe that the experiences of African Americans with cocaine-related problems may be contextually and experientially different than Euro-Americans. Contextual implies the

environment in which these substance-related problems arise and in which recovery takes place. For African Americans, that environment may be characterized by racist ideologies that contribute to organizational and institutional racism. Ziter (1987) asserts "a racist society provides an environment for recovery for a black [substance user] that is different from the environment it provides for white [substance users]" (p. 132). Experiential relates directly to actual participation in, navigation of, and perception of dominant cultural organizations and institutions by African Americans seeking assistance for cocaine or other substance-related problems. The ability of the individual to access treatment systems, receive support, and successfully alter past substance use behaviors sends a message to the general African American community that treatment is not only available but effective in at least decreasing use and its detrimental effects. Those individuals who are unsuccessful in altering substance use behaviors or who cannot access treatment return to the community eschewing hopelessness and powerlessness.

It is suggested that the occurrence of disparities is complex and is linked to the precarious relationships between African Americans and Euro-Americans. Past negative attitudes towards African Americans by Euro-Americans have contributed to the former's current social marginality and a lack of structural incorporation in the dominant culture. These two factors are reinforcing. The lives of some African Americans are characterized by a sense of powerlessness, learned helplessness, and high levels of stress. Substance use is believed to be not only a means of social lubrication for some, but a coping strategy to buffer continued frustrations and disappointments for others. Cocaine provides the context for the examination of recovery experiences because of the noted change in drug preference patterns. In this conceptual framework excessive cocaine use is the result of genetics, ambiguous norms and rules regarding drug use and neuro-behavioral and psychological reinforcement. Cocaine, in particular inexpensive crack, is appealing because of its price, and the immediacy of its effects , that is perceived power, control and euphoria. In African American communities such as those described by Bowser (1988) and Cheung (1991), individuals may find cocaine appealing because of its effects and its economic rewards. For some, cocaine sales and distribution is an employment opportunity that has immediate returns on the initial investment. Cocaine's stress-buffering capacity provides strong reinforcement for individuals whose lives are characterized by a perceived sense of hopelessness, helplessness, powerlessness, and depression. Many African Americans communities have few social resources available to buffer continuing life strains and stresses.

Continued use of crack or cocaine may lead to the occurrence of cocainerelated problems. In addition to the problems encountered by all individuals with a history of excessive cocaine use, African Americans with cocaine-related problems must adjust and adapt to the continuing and persistent effects of racism, which provides an environment for recovery that is contextually different than the one it provides for Euro-Americans. This environment for recovery is believed to be contextually different for African Americans than for Euro-Americans. The essential structure of the recovery experience is intricately tied to the individuals' history. This history is the "figure-ground" that anchors the individuals' perceptions of himself or herself in the world (Munhall and Oiler,

1986, p. 73). In essence, this history or figure-ground is different for African Americans than Euro-Americans. It is suggested that excessive cocaine use exacerbates the disadvantaged condition of many urban African Americans. Cocaine-related problems not only exacerbate individual problem severity, but also tax limited community resources and interfere with community organization. This further disrupts African American communities, reinforcing their position of social marginality and hampering their equal access to social, economic, and political institutions.

If the African Americans experience of dominant culture institutions and organizations is different than that of the Euro-American because of actual and/or perceived racism, and if there are persistent disparities across a wide variety of contexts, then it seems plausible that the experience of substancerelated problems, treatment, and recovery may be different. This investigation attempts to disclose the differences in the experiences of recovery and is concerned with critical factors in the recovery experience and perceived barriers to initiating and maintaining abstinence.

Assumptions of the Investigation

1. Race/ethnicity is a non-treatment factor that cannot be understood apart from its relationship to culture and ethnicity. Race is an important factor that subjects African Americans to undue stress that results from what Cheung (1991) calls a lack of structural incorporation.

2. Historical forces such as racism and socio-political influences such as a lack of structural incorporation influence not only access to treatment but availability of treatment.

3. The process of recovery for African Americans is contextually different than the process of recovery for Euro - Americans because of historical and sociopolitical influences in the lives of African Americans that account, in part, for past and current disparities in health, morbidity, and mortality.

4. African Americans interpret their lives, both individually and collectively, through knowledge about past and current race relationships.

In essence this investigation seeks to discover what is the essential structure of initiating abstinence and maintaining abstinence. What are the identified problems and barriers that individuals must navigate. Finally, are there commonalities across racial groups.

Questions Guiding the Investigation

1. What are the perceived critical factors, if any, in the decision to initiate abstinence. What is the essential structure of the decision to initiate abstinence?

2. What are the perceived problems or barriers, if any, to initiating and/or maintaining abstinence, as reported by those with histories of cocaine related problems ?

3. What are the perceived critical factors, if any, in the decision to maintain abstinence ?

4. Are there differences between African Americans and Euro-Americans in the critical factors to initiating and/or maintaining abstinence and/or problems and barriers as identified in the respondent narratives ?

Definition of terms

The following definitions have been derived from the literature, keeping in mind that no single definition can capture the complexity of the phenomena to be investigated in this study.

<u>African American</u>: An individual of African ancestry belonging to the race of Negroid peoples and self identifying as such; born and reared in North America. In this definition race converges with ethnicity and "cannot be interpreted apart from its environmental context" (Wilkinson and King 1987, p. 58). This definition excludes those of Hispanic or Spanish origin. The term African American embodies unique experiences and histories that shape individual perceptions. In a racially stratified society, African Americans are recognized as a minority group. The term African American will be used in opposition to the term black.

<u>Cocaine-related problems:</u> Cocaine related problems encompass those problems that are associated with excessive cocaine use, cocaine abuse and/or cocaine dependence. Cocaine related problems may include interpersonal difficulties and conflicts, employment related problems, legal difficulties, financial difficulties, and health related disabilities and dysfunction. Cocaine related problems ensue because of an inability to discontinue or decrease use when use begins to interfere with the user's existence, and may require outside intervention. It is defined as continued use of cocaine to the extent that health, economic, and/or social functioning are impaired. It is marked by repeated use of the cocaine in the face of negative bio-psychological or social consequences. It may involve the use of other substances; however, cocaine is the primary drug of choice. In this investigation cocaine-related problems may be self-ascribed or professionally diagnosed.

Euro-American: An individual of European descent born and reared in North

America. The individual identifies as white or Caucasian. In a racially stratified society, Euro-Americans are recognized as the majority group.

<u>Essential Structure</u>: this is conceptualized here to imply the content and context of the individuals story. It is the why, when and for what that respondents note in their descriptions.

<u>Mutual self-help groups</u>: An organized group of individuals who share a common goal and meet regularly to discuss issues, strategies, and methods for achieving the goal. In this investigation, mutual self-help groups are limited to those groups that focus on abstaining from drugs or alcohol, e.g., Alcoholics Anonymous, Narcotics Anonymous, Cocaine Anonymous. These groups are commonly known as twelve-step programs in the general community. <u>Perceived barriers</u>: Any of several factors that individuals disclose as inhibiting or preventing the maintenance of continuous abstinence. These factors can be interpersonal, intrapersonal, or socio-environmental.

<u>Recovery</u>: Recovery is a phenomenon in a state of flux. This investigation recognizes it as a multidimensional phenomenon. It is process-oriented, and poorly defined, lacking both a specific beginning and end point. It is thought to involve cognition, affect, and behavior. This investigation is focused on the post use period (i.e., abstinence) which may have been facilitated by treatment intervention. This definition acknowledges that recovery is an ever expanding phenomenon. It may involve a variety of behaviors including abstinence.

Chapter 3. Methodology

This descriptive, exploratory investigation examined the recovery experiences, perceived critical factors, and barriers in the decision to initiate abstinence, problems and barriers that may influence initiation and/or maintenance of abstinence and factors critical to maintaining abstinence of individuals with self-disclosed histories of cocaine- related problems. There was a primary focus on the African American recovery experience as compared to Euro-Americans.

Design and Setting

This investigation was cross sectional and primarily descriptive. Data were collected at only one point in time. Respondents were free to choose the setting in which to complete the questionnaire and the interview. Settings varied from cafes, to restaurants, to parks, and to the respondents home.

Sample

A convenience sample of 40 respondents was solicited using a snowball or chain referral method of recruitment. Respondents were drawn from the general recovering community in the San Francisco Bay area. Announcements were posted in mutual self-help group meeting spaces in the community. The coprincipal investigator also, through word of mouth, approached collegial contacts for assistance. These individuals were asked to spread the message about a study focusing on recovery from cocaine. Little is known about the phenomenon of interest. A preliminary power analysis with an alpha of .05 and a power of .80 would have required a sample of approximately 80 respondents . Since the primary focus of the investigation centered on the qualitative component, it was felt that 40 respondents represented an adequate sample.

Human Subjects Assurance

Potential subjects were instructed to contact the co-principal investigator. Prior to initiating the interview, respondents were asked to sign a standard University of California consent form explaining the procedures and purposes of the study, and were also given a copy of the form to keep (See Appendix B). Respondents were required to sign a receipt for \$20 cash in payment for their participation. They were also given a code number which served as their personal identification throughout the study. Confidentiality was assured and maintained throughout the investigation. At no time was any respondent referred to by name or other pertinent identification that could violate that individual's confidentiality and right to privacy. Respondents could refuse participation at any time during the course of the study, including the interview. Tape-recorded face-to-face interviews were coded to correspond to the selfcompleted questionnaire. Both the questionnaire and the tape-recorded interviews were to be kept in locked files by the co-principal investigator and to be destroyed within five years of the investigation.

<u>Criteria for Sample Selection and Participation</u>

To ensure homogeneity on income and age, two levels of criteria were used for participation in the study. The first level of inclusion criteria mandated: (a) a history of self-disclosed cocaine- related problems, (b) an age range of 18 to 45 years of age, and (c) income less than or equal to \$25,000 annually. Income was

limited to the above range to minimize potential class effects that may influence recovery experiences. The imposed age range represented an attempt to limit cohort effects, if any.

If the potential respondent met the first set of criteria they were then required to meet the second set which included: (a) no psychiatric co-morbidity or dysfunction, (b) no prior history of methadone detoxification or maintenance, and (c) willingness to participate in the study. Respondents with psychiatric comorbidity or dysfunction were excluded because of the potential co-variation between drug and alcohol use. Respondents with a history of methadone detoxification and/or maintenance were excluded because the substantive focus of the study was cocaine. Recent or past methadone use, either for detoxification or maintenance, would suggest a significant primary interest in heroin as a drug of choice.

Data Collection Methods

A pilot study was conducted in the fall of 1991. Respondents (N=5) were encouraged to provide feedback on the length of the session, the question format, wording, and interpretation. The questionnaire and interview guide were structured based on the pilot study participants' recommendations, and on the literature (Brown, 1985; Sudman and Bradburn, 1988).

Techniques

The primary technique employed in this investigation combined face-to-face tape recorded, semi-structured interviews and a self- completed questionnaire. The open ended, face-to- face interview constituted the initial phase of the session and required approximately $1\frac{1}{2}$ - 2 hours to complete. The second

component of the session involved completion of the questionnaire, which took approximately $\frac{1}{2}$ - 1 hour of time. Total time of participation was 2 - 3 hours. The questionnaire was completed in the presence of the co-principal investigator to allow the respondent to ask questions if necessary. In the final phase of the session the co-principal investigator reviewed the questionnaire to ensure its completeness and thanked the respondent for participating.

Instruments

The 36-item self completion questionnaire was adapted from an intake interview schedule used by the San Francisco Veterans Administration Medical Center inpatient substance abuse unit (See Appendix A). The original questionnaire was designed to collect demographic data on treatment populations and to assess criteria for substance abuse and/or dependence and related problems as stipulated by the DSM III-R. This questionnaire, chosen because of its comprehensiveness, covered the following areas: a) educational history, b) vocational training, c) source(s) of income, d) living arrangement and type of dwelling, e) whether or not the respondent lived with those who actively used drugs or alcohol, f) drug history, g) previous treatment and aftercare experiences, h) twelve step participation, i) negative effects experienced when using/not using the drug of choice, j)perceived comparison of overall life satisfaction, k) family/significant other relationships, l) health, and m) job performance and job satisfaction when using/not using.

The interview involved face-to-face taped conversations with respondents. In this initial phase of the investigation respondents were asked to talk freely about: a) their drug and alcohol experiences, b) their introduction to these

experiences, c) their family history as it related to drug and alcohol use, rules and norms, d) their experiences as a result of continued drug and alcohol use, particularly focusing on the problems engendered by use, and e) decision process(es) as expressed in the interview (see Appendix A). In order to determine if the recovery experiences are different for African Americans and Euro-Americans it is essential to learn and to understand the individuals' perception of the experience. This was best accomplished by techniques that allow the respondent to openly and freely discuss points of interests. The open ended interview format concentrates on the individuals' experiences. The semistructured interview format, chosen, because of its flexibility, was derived from the work of Brown (1977, 1985) and based on the developmental process of recovery. Browns' interview guide grew out of the seminal works of pioneers in the study of post - treatment functioning and recovery (Gerard et al. 1962; Mulford 1977; Wiseman 1980; Kurtines et al. 1978). These seminal works explored what happens when individuals cease to engage in problem drinking, how the individuals' behavior compares to previous baseline measures and psychological functioning of control subjects. The primary purpose of the interview guide was to elicit those topics considered to be important to the respondent. All respondents were asked the same series of questions, but the coprincipal investigator probed confusing or ambiguous responses and allowed the respondent to discuss those experiential aspects deemed important.

The open ended format facilitates an investigation of the lived experience as perceived by the individual. The descriptions of initiating abstinence and maintaining abstinence are in actuality reflective of the individuals' references

through living in the world. These experiences are interpreted and constituted through the individuals' biography and perception of the world. In order to understand the essential structure of individuals' recovery experiences it is imperative to examine the individuals' perceptions of factors critical to initiating and maintaining abstinence and perceived problems and/or barriers. It was felt that a structured questionnaire would have forced responses and prevented a thorough exploration of the subtle nuances that may characterize differences across racial/ethnic groups as they relate to recovery experiences. Questions were structured from general and broad to specific and narrow. Validity of the open ended data was ascertained by assessing for face validity. Transcripts where reviewed as well for consistency and face validity. The respondent was reminded that there were no right or wrong answers and that if he or she required help the co-principal investigator was available to clarify questions.

Data Analysis

Analysis of the data was performed using a University of California supported statistical package called CRUNCH. Data were re-entered twice and compared. Discrepancies were rechecked against the respondent's original response and re-entered accordingly. Once a data file was established and all data were input into the CRUNCH file, three basic analyses were done: (a) simple demographics and frequencies, (b) cross-tabulations, and (c) chi-square statistics for comparisons across racial/ethnic groups. The majority of the items were coded to reflect ordinal data. Other items were categorical and forced respondents to choose only one response. There were three likert-type scales asking respondents to rate their abstinence to date and to draw comparisons

across several contexts while actively using and not using. Missing data were coded per the protocol of the statistical program and included in the computation of prevalence estimates.

The primary aims of this research was towards description of those factors critical to the decision to initiate abstinence, perceived problems, and barriers to maintaining abstinence, and factors critical to maintaining abstinence. The open ended interview data were analyzed based on a method advocated by Brink and Woods (1988) and Strauss and Corbin (1990). The analysis was an interpretive one. Specifically, each response was reviewed to ascertain significant statements that answered the questions regarding critical factors either in the decision to initiate or maintain abstinence, and problems, and/or barriers. These separate responses were coded one by one. The same procedures were followed for each respondent. Significant statements were then reviewed and listed for each area of interest. These statements were reexamined to determine if they suggested a particular theme that may express the significance of the phenomenon. After listing all significant statements there was an attempt to categorize like responses and an attempt to ascertain the themes or meanings conveyed. Responses were evaluated with respect to patterns that reflect the essence of the respondents' perceptions regarding critical factors for initiating and maintaining abstinence, and problems and barriers. Every attempt was made to ensure that the data reflected the context in which it was originally reported by the respondent. Those respondents who interviews were characterized by contradiction, incomplete responses, a sense of general confusion, and a lack of consistency were excluded from analysis. Only one interview was excluded from analysis. It

Critical Factors

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was felt, following completion of the interview, that the respondent was not reliable.

Chapter 4. Results

There were no significant differences by race for any demographic variables. Tables 1 through 6 provide a concise presentation of the data. The sample characteristics are followed by racial/ethnic profiles which highlight differences. These differences were statistically significant.

Sample Characteristics

Table 1 provides a summation of the demographic data (race, gender, education, source(s) of income, religion and marital status). Table 2 furnishes historical data on the incidence of adolescent drug and alcohol use. Table 3 provides data on the preferred method of cocaine administration and preferred secondary drug preference. Table 4 gives data on the most commonly reported negative effects or consequences. Table 5 gives information on treatment history and 12 mutual support group participation of the sample. Table 6 provides data on arrest history and the types of arrest. When appropriate, data are discussed and compared to national trends.

Insert table 1 about right here

The average age of respondents was 32 and the range was 20-40. Adolescent marijuana use was common. Over 90% of the sample had a history of familial drug and/or alcohol abuse. Fathers and brothers were more likely than other family members to have substance related problems. The mean number of months abstinent was 12. Over half (60%) sample reported full or part time employment.

An age cohort effect existed for the sample. Older respondents reported initiation to cocaine via snorting and during the late teen years. Younger respondents reported initiation to cocaine in the early teen years. Younger respondents were more likely to smoke crack or have tried "free base" as the initial method of cocaine administration. For younger respondents, initial inhalation use of cocaine involved the mixing of crack with tobacco or marijuana in what was termed a "coke smoke," "cocktail," or "grimmie". Alcohol was the preferred second drug of choice in combination with cocaine or alone (see table 2).

Insert table 2 about right here

Marijuana was second only in use to alcohol. Male respondents were more likely to prefer marijuana (40%) as the second drug of choice in opposition to female respondents who preferred alcohol. Thirteen percent of the male respondents listed heroin as the second drug of choice in

5.0

5.0

17.5

7.5

0.0

Table 1 Demographics

<u>Race</u>	<u>%</u>	<u>Gender</u>	<u>%</u>	<u>Education</u> ^a	%	Source of Income ^b	%
African American	47.5	Female	42.5	HS/GED	75	SSI	20
Euro American	42.5	Male	57.5	Associate Degree	8.0	Family Support ^c	12
Other 10				Bachelor	17.5	General 17.5 Assistance	
				Masters	3.0	SSPI/SSA	10
						Paycheck	42.5
Bapt	Relig ist	jion	% 20	Singl		tal Status er married	% 6.5

Catholic	12.5	Divorced
Other	32.5	Separated
None	22.5	Widowed

2.5

10

a Based on $\underline{n} = 36$

Lutheran

Methodist

b Based on $\underline{n} = 38$; <u>M</u> \$896.00 per month

^c Includes those reporting Aid to families with dependent children (AFDC)

Single, living w/partner

Married

Table 2 Adolescent Drug and Alcohol Use

Age of first marijuana use

	%	age range
Range	35	13 - 15
African American ^a	42.1	13 - 15
Euro-American ^b	35.3	10 - 12
Other ^c	75.0	13 - 15

Age of first alcohol use

Range	47.5	13 - 15
African American	47.4	13 - 15
Euro-American	41.2	13 - 15
Other	75.0	13 - 15

a total African American sample $\underline{n} = 19$ **b** total Euro-American sample $\underline{n} = 17$ **c** total other sample $\underline{n} = 4$

Critical Factors

combination with cocaine in 'speedball'.

Insert table 3 about right here

None of the women reported the use of heroin and cocaine together or heroin as a secondary drug of preference.

Most respondents engaged in the 'upper-downer' method of dose - effect titration involving the use of a central nervous system (CNS) depressant (Miller, Millman and Keskinen, 1989; Smith, 1984). CNS depressants, according to respondents, reduced or eliminated certain negative effects or occurrences. Certain negative effects (see Table 6) were common with crack or intravenous cocaine use. The constellation of effects included anxiety, paranoia, and hyposomnelence.

Insert table 4 about right here

Table 3

Preferred Method of Cocaine Administration and Secondary Drug Preference (N = 39)

Cocaine Administration	<u>%</u>
Inhalation ^a Injection	67.5 17.5
Snorting	10.0
Oral	5.0

Secondary Drug Preference ($\underline{n} = 38$)

Alcoholb	31.2
Marijuana ^c	31.5
Heroin/other narcotic ^d	7.8
Amphetamine, hallucinogens	13.1

a inhalation refers primarily to crack use in this sample

b women more commonly reported alcohol in combination with cocaine

c men reported marijuana use in combination with cocaine

d heroin use was most often mention as a "speedball"

Most Commonly Reported Negative Effects

or Consequences

When using cocaine	<u>%</u>
Racing thoughts	72
Suicidal thoughts	57.2
Depression	82
Hallucinations	67.5
Irritability	70
When not using cocaine*	
Irritability	82
Depression	89.7
Suicidal thoughts	64
Currently experienced during abstinence	
Mood Swings	71
Drug cravings	52

* This does not equal the current episode of abstinence.

The predominant pattern of cocaine use was (a) characterized by a strong preference for the form of cocaine associated with (b) the method of administration.

Respondents were queried about the negative effects that they experienced when using, when not using and since initiating abstinence. Negative effects included (a) suicidal thoughts, (b) suicide attempts, (c) hitting their spouse, (d) hitting their children, (e) bar fights, (f) loud arguments, (g) irritability, (h) hallucinations, (i) racing thoughts, (j) depression, and (k) other. Currently experienced negative effects included insomnia, difficulty relaxing, irritability, mood swings, weight loss, sexual problems, trouble concentrating, weight gain, violent thoughts, oversleeping, trouble remembering, racing thoughts, loss of appetite, sexual anxiety, suicidal thoughts, headaches, drug and/or alcohol cravings.

Many respondents reported negative and almost fatal health consequences when using cocaine. The mean number of negative effects when using was 5.9 (95% C.I. 5.003 - 6.839) vs only 4.8 (95% C.I. 4.039 - 5.646) when respondents were not using cocaine (See Table 4). The mean number of reported negative effects experienced during the current period of abstinence was 2.05 (95% C.I. 1.679 - 2.427). Respondents reported fewer negative occurrences and effects when not using cocaine.

Respondents were asked about their perceived health when using and not using cocaine, their perceived job satisfaction and job performance when using and not using, their perceived life satisfaction when using and not using, and their perceived relationship functioning when using and not using. Overall, the

sample perceived that their health, job satisfaction, job performance, relationships, and overall life satisfaction improved with current abstinence. When asked to rate their current level of abstinence, 44.4% of the sample described abstinence as difficult. Ninety one percent of the sample attended twelve step meetings (See Table 5) and over fifty-eight percent of the sample attended 12 step meetings a minimum of four times per week.

Insert table 5 about right here

Treatment History and Twelve Step Participation (N = 39)

Prior Treatments	<u>%</u>	Attend Twelve Step Programs ^a	<u>%</u>
1-2	50.0	once a week	7.5
2-3	17.5	twice a week	5.0
3 - 4	12.5	three times a week	17.5
		four times a week	57.5
		Do not attend	12.5

a 87.5% of the sample reported attending twelve step programs

Profiles Across Racial/Ethnic Groups

There were no significant statistical differences between African American and Euro-Americans across demographic variables, reported negative effects or consequences experienced when using, when not using, and currently. More African Americans than Euro-Americans were single or never married (68% versus 53%). Sixty-nine percent of African Americans attained a high school diploma or its equivalent in comparison to 81% of Euro-Americans. A greater proportion of African Americans (57%) than Euro-Americans (38%) report some type of vocational training. The majority of African Americans were not employed full time. However, a greater proportion of African Americans (60%) than Euro-Americans(30%) reported full time employment.

Euro-Americans were more likely to report that they lived with people who used drugs. Seventy one percent of Euro-Americans, in contrast to 29% of African Americans, reported that they lived with people who use alcohol as well. Eighty percent of African Americans lived with dependent children versus 20% of Euro-Americans. Euro-Americans were more likely to live with friends (29%), others (24%), or alone (18%).

A greater percentage of African Americans (53%) in opposition to Euro-Americans (41%) reported a history of 1-2 prior treatments (See Table 5). African Americans were just as likely as Euro-Americans to attend 12 step mutual support group meetings.

Euro-Americans were more likely to report arrests for drunk driving (80% versus 20%). African Americans were likely to report arrests for assault (51% versus 29%). Arrests for drug possession, drug sales, and theft were similar

across the two groups.

Insert table 6 about right here

A greater percentage of Euro-Americans (71%) than African Americans (29%) preferred intravenous cocaine administration. African Americans (84%) preferred inhalation (i.e., crack or freebase) as the method of cocaine use. This pattern echoed national trend data from the National Household Survey on Drug Abuse (1991) and data from the Office of Substance Abuse Prevention (1990). A greater percentage of African Americans (62%) than Euro-Americans (39%) preferred alcohol as the second drug of choice. Euro-Americans (66.9%) were more likely to prefer heroin in combination with cocaine in what is known as a speedball.

Table 6 Arrest History

Number of arrests	%
1. 0-1	27.5
2. 2 - 3	35.0
3. 3 - 4	7.5
4. 4 - 5	27.5

Type of Arrest	%
Driving under the influence	25.0
Sales and/or possession	37.5
Disorderly Conduct	27.5
Public Intoxication	20
Assault	17.5
Theft	42.5

Overall, respondent agreed that 12 step programs are effective for Euro-Americans and African Americans. Respondents were evenly divided on the statement that some groups of racial and ethnic minorities are more likely to use drugs and alcohol. Respondents were likely to disagree that (a) one is considered abstinent if he or she stops using his or her favorite drug and (b) agree that sobriety is more than not using or drinking.

The respondents' descriptions are the organizing framework for the presentation of findings. These descriptions are primarily qualitative in nature. The reporting of qualitative data results has been the focus of attention in the recent past (Munhall and Oiler, 1986). Not all qualitative work is for the purpose of theory generation. Qualitative work should be evaluated based on the original purpose. The following sections describe, from the narratives, (a) what factors were critical to initiating abstinence, (b) what factors were critical to maintaining abstinence, and (c) the perceived problems and barriers. There is a focus on possible differences that may be related to race/ethnicity.

The qualitative data demonstrated that that there are common themes that characterize individuals' decisions to initiate abstinence. Stall and Biernacki (1986) and Tuchfeld (1981), both studying spontaneous remission among alcoholics, have reported similar factors to those I have reported here as significant in the decision to initiate abstinence.

1. What are the perceived critical factors, if any, in the decision to initiate abstinence? What is the essential structure of the decision to initiate abstinence ?

Essential structure refers to the context, content and experiences which are believed to be significant to the respondent.

Critical Factors in the Decision to Initiate Abstinence

Factors are critical when they (a) create dissonance and (b) raise the level of anxiety and/or consciousness of the respondent. Critical factors involve change which is not only unanticipated but also not desired. They can include events, communications, happenings and/or incidents. Critical factors were grouped into three categories: (a) perceived loss, (b) despair/distress, and (c) belief testing. Below are selected example taken from the narratives.

Loss/Separation

Loss refers to the potential loss of significant others which may include children, parents, siblings, and spouses. These individuals may indirectly influence the decision to initiate abstinence through:

- 1. A need to maintain attachments.
- 2. Fear of loss or separation.
- 3. Fear of endangering fetal health.

Significant others are important because respondents feel a sense of attachment and loyalty. Significant others may (a) withhold rewards, (b) give punishment, (c) act through consciousness raising by confronting the respondent with his or her abusive patterns of use and/or by limiting contact or interactions with the respondent, and (d) removing valued social support. They may help respondents to not only define the problem but to identify its existence. One respondent's comment exemplified this:

You have two choices either you loose your child or you go to treatment you can have your drugs and your friends but don't ever come back to me. I don't want you to have any part of this boy's life.

Another respondent stated that her social worker said:

When this baby is born and you are not in the program or you are not clean, they aren't going to let you have your baby. I just couldn't see my baby not with me.

Respondents were forced to re-evaluate their need for contact and their desire to

keep their children. Children for women, were a significant factor or causal

condition in the woman's decision to initiate abstinence.

My daughter. It wasn't for me it was for her. It was so I could be the mother I thought I could be...

My son needs a mother, his father is not going to be there. I was weighing out what is more important. Is my party life more important or is my son more important?

Fear of endangering fetal health was a critical factor.

I couldn't do it knowing it would effect my child. Every time I did it my heart would race so much. I kept thinking, my God, what is this baby's heart doing? I figured if I'm going to have this baby then I'm going to have to stop this. At this point it was apparent to me that I was not about to save my own life. Maybe this baby would snap me into gear.

I discovered I was pregnant at the time and I started wrestling with the idea of doing this while pregnant.

It wasn't a problem until it affected my child. That was my stopping point. I wouldn't have done it for myself.

Under conditions of threat and loss or separation of significant others

respondents may initiate abstinence. The greater the level of perceived distress

and/or potential for loss/separation the greater the probability of behavior change.

This was (a) a symbolic removal of support and resources calling attention to the respondents' substance abuse problems and (b) a perceived loss.

My family was at the end of their rope. They where trying to help me and they couldn't help me.

I had cut off my family. One of my brothers had been aware that I had been using drugs, he didn't want to see me...

My boyfriend said if you use I don't want anything to do with you.

During those months my sister died of cancer. That was a blow, we were very close A week later I found out I was pregnant I had lost someone very dear to me and I felt empty. For the first time I thought where are you going with this ...

Despair/Distress. There may be some overlap between the critical factors of loss/separation and despair/distress because the former may influence the latter. Actual or perceived loss/separation may increase the level of despair/distress. Despair/distress influenced the decision to initiate abstinence by creating dissonance. Dissonance increased the current level of anxiety prompting the individual to take action to reduce the level of distress. Despair may be a product of multiple attempts to change behavior. Despair may be characterized by suicidal ideation, hopelessness, or manifest as emotional fatigue and depression as reflected in the following statements :

Finally one night I am sitting on a bus bench. I make the decision to kill myself.

My whole life was gone. All the cocaine and all the booze couldn't help me anymore. I started really hating my life. I didn't care. I had minus self esteem I was becoming suicidal.

I woke up tired from the hustle. I was beat up from what drugs had done to me.

I thought I was going insane.

What happened was internally, I was breaking down. Mentally I was breaking down because I had no outlet for all the things I was feeling for all of the frustrations.

I got serious about recovery because I was scared. I was afraid of dying.

I decided to kill myself because, you know, what was the use.

I tried suicide. I got that depressed. I had no one really to talk to I was thinking this had gone so out of hand, I don't know how I can salvage anything . . .

I felt like I was dying. I looked at my arms and saw the roadmap. I was thin It was only about getting something to drink, getting some dope, burning somebody.

Suicidal ideation and gesturing was common among respondents. For some, despair/distress led to suicidal gesturing. This ideation and gesturing led to outside intervention and treatment which was critical to initiating abstinence.

Belief testing

Acceptable substance use may be guided by preconceived rules or

conditions. Societally-mandated ideologies of "addiction" pit control against uncontrolled use, temperance against temperance and restraint against nonrestraint. Some individuals believe that some are unable to cease use without formal intervention. This belief helps to define acceptable versus unacceptable substance use. The following statements capture the dynamic interplay between beliefs and behaviors.

Yes, I would say I can stop. I would test myself periodically or I would rationalize my way back to it. I had been good. I hadn't used for a few days, so I could have some...

I didn't think I had a problems because I had stopped so many times. I would go for weeks.

I thought I was cured. I thought I didn't have a problem anymore. . . . I thought I could get high and be social.

I knew I had a problem. I knew something was wrong. I would try to stop for a couple of days and I couldn't... I would neglect everything for this drug.

Brief periods of continuous abstinence not only challenge individual notions of addiction but conventional societal ideologies and wisdoms. Temporary cessation or a decrease in use seems to bolster a fragile sense of control. Stopping, even temporarily, undermines evidence that may be necessary to change behavior. However, unsuccessful attempts to initiate and maintain abstinence helped concretize, for some respondents, the existence of a problem.

> There were so many of those false starts where I said "I'm not going to do this anymore".

A regression to prior abusive patterns of use may (a) increase dissonance, (b) solidify the existence of problem, and (c) lead to behavior change which may include abstinence. Respondents may regress to prior patterns of behavior, given a corresponding change in other conditions such as anxiety, fear, and threat, that will be re-evaluated once the threat becomes salient again. Respondents may initiate abstinence if they judge that their use violates some internalized set norms. Taken together, these critical factors to initiating abstinence promote an understanding of the context, content and experiences of this sample. The decision to initiate abstinence involved some degree of contemplation on the part of the respondents. Contemplation involved an evaluation of beliefs, weighing of pros and cons, collecting evidence either to support or refute change, and comparing and contrasting. Respondents may begin to contemplate abstinence when faced with the threat of loss/separation, distress/despair, and/or events and communications that question not only the belief system but the current course of behavior. The greater the perceived loss and threat of separation and level of distress/despair, the more likely the respondent engaged in contemplation. Evaluation helps to determine the necessity of behavior change, when and for how long. Respondents not only evaluate, weigh, compare and contrast but family and significant others engage in this process as well. The consequences of evaluation included either (a) decreasing use, (b) stopping temporarily, (c) stopping permanently, or (d) continuing with the current course of behavior.

The concept of an *abstinence posture* grew out the analysis of the narratives. It is not a critical factor but adds to the understanding of abstinence. An

abstinence posture can be (a) undertaken for respite, (b) to minimize anxiety and distress, (c) invoked to ward off negative consequences and threat, and (d) to protect health or valued relationships. Traditionally, the concept of abstinence implies an end point or outcome. In actuality, the concept of an *abstinence posture* best captures the dynamic complexity of change. An *abstinence posture* is defined as an attitude or position assumed by some respondents to ward off threat, to minimize anxiety and distress, or to calm the demands of significant others. It seems more to represent a compliance measure more than a genuine acceptance of the need for permanent change. An *abstinence posture* not only assumes that behavior change is temporary but that abstinence is temporary too. An example summarizes this notion:

I stopped because I was running too hard. I knew if I kept it up I would be getting sick or something. Sometimes, I stopped because I got tired.

2. What are the perceived problems or barriers, if any, to initiating and/or maintaining abstinence as reported by those with histories of cocaine problems?

Problems and Barriers to Initiating and/or Maintaining Abstinence

Perceived problems and/or barriers are labeled as intervening conditions that can constrain action or lead to failed action. Respondents were queried about episodes of lapse or relapse, the attributions for such lapses, and/or the perceived problems or barriers that may hinder initiating or maintaining abstinence. The following categories of problems and barriers emerged from the data indicating: (a) social support, either a lack of support or negative support, (b) associational cues like people, places and things, and (c) inability to tolerate negative feelings or overwhelming feelings. Negative social support or lack of support may interfere with the ability to initiate or to maintain abstinence through its interaction with the category of associational cues. Social support may be goal specific or general in nature. In essence, goal specific support is support that is focused specifically on abstinence. Twelve-step mutual support groups may be the primary resource for obtaining goal specific support.

Lack of social support/negative social support.

The following statements reflect negative social support:

I had lost all of my resources. At this time I burned all of my bridges.

I was living with an addict who didn't care about recovery. I kept relapsing every 10 or 15 days

Someone would say do you want a line. We would say we don't do that anymore. Then our friends would put us down. I guess peer pressure and being around it, availability, and we would end up using.

I was pregnant and I was worried. She said don't worry. Molly used to get high during her pregnancy and she had a perfect baby. I said O.K. I started back.

In these examples social support is perceived as negative when it undermines the respondent's attempts to maintain abstinence by either presenting conditioned stimuli and questioning the existence of a problem. Some African Americans may interpret a lack of social support or negative support as racially motivated

One African American respondent explained that:

Racism exists even in recovery. It comes across like, say I am a newcomer, I will not get as many handshakes as a white person. Recently, there was a white couple. She had two years and he had ten days Do you know that couple got invited to dinner, they got phone numbers. That would not have happened for a black person.

Another African American respondent observed that the discussion of cultural issues and issues of race and racism are not encouraged in 12 mutual support groups. More important, there was a lack of discussion of the sensitive issues of race and racism between African Americans and Euro-Americans who participate in 12 step mutual support groups.

I think there's a lot of racism. People don't talk about it. It's stuck way down and people put on a happy face. We don't talk about it because it implies that we're bad.... I notice that when we come in, the black women, we're treated differently. I bring it up I am perceived as negative. It's happening, its real.

African Americans experienced problems such as dealing with painful affects that are directly and indirectly related to feelings of racism, feelings of extreme difference and issues of identity. Twelve step mutual support group philosophies may not reflect the realities of most African Americans. Another African American respondent observed that:

The whole sobriety model is built on basic American values buy a house, a car, get a job, get a dog and live happily ever after, go to meeting and be grateful. What they don't deal

with is issues that affect black urban people. Basic problems with self esteem and poverty.

Cultural differences may be problematic because these differences may be misunderstood within the confines of 12 step mutual support groups.. An Asian woman explained that her participation in 12 step program discussions was limited because she perceived there to be a lack of understanding of Asian cultures. Asian cultures do not condone the discussion of family or individual problems outside of the immediate family.

I don't think any of us are comfortable laying our shit out before anyone who isn't Asian. People don't understand where we are coming from. They don't understand our culture. Our culture could be regarded as dysfunctional because feelings are not something you talk about.

I don't expose that side unless there is some substantial representation of color in meetings. I don't feel like I want to go through this whole dialogue to make people understand. Most of them are white.

The concept of substantial representation of color may be

significant for racial and ethnic minorities who participate in 12 step mutual support groups. Perhaps the concept of *substantial representation of color* imparts some cultural comfort for visible racial/ethnic minorities particularly in interracial situations (Bell, 1990). I define *Substantial representation of color* as the presence of visible racial and ethnic minorities in adequate numbers as deemed sufficient by the respondent to permit or allow for a discussion of sensitive issues that may focus on race and/or culture. *Substantial representation of color* may facilitate an unspoken identification with others who

not only share substance related problems but share direct and indirect problems related to social marginality. However, *substantial representation of color* does not necessarily guarantee that visible racial/ethnic minorities will freely discuss sensitive issues of culture, race, and racism.

Associational cues. People, places and things represent another category of problems and barriers. Associational cues are conceptualized as factors that interfere with the maintenance of an abstinence. They can include (a) drug effects (in particular, euphoric recall of cocaine), (b) visual or olfactory cues within the environment, (c) people with whom the respondent has engaged in prior substance use and whom the respondent may have continued contact which may be related to negative social support, and (d) access. The following statements reflect the types of associational cues that respondents may confront:

It was one of those visual things. This person pulled out cocaine right in front of me. I went right to the cash register took out fifty bucks and gave it to him . . .

Once it [cocaine] was in the room that was it.

I just happened to be at this guy's house again. They were smoking and it tingled my nose and I was off again.

Another respondent stated:

Some friends came to visit and had a bag of crank that I could smell across the room.

People who use drugs act as associational cues, are a source of negative social

support, and drug access.

I would think about it. I would crave for it. I would think about the socialization of it

.... we didn't know anybody else that was not using. All of our friends used drugs.

I didn't know what to do with myself. I didn't have any friends. If I wasn't using I didn't have any friends . . . All I could do to be around people was to be around people who used

Certain environments can act as barriers to initiating and maintaining abstinence. Environments may (a) offer high access to the substance of choice and (b) contain numerous associational cues which can trigger olfactory and visual memories.

When I was living in St. Louis I was always within a few blocks of it [drugs]. I wanted to quit, but I was still living in the environment. That's hard when all you're faced with from sunup to sundown, from dusk to dawn, is drugs or drug related. Its hard to quit in that environment.... I was never far from all of the people who were involved in drugs, and the drug themselves. All of my associates where in the game.

Overwhelming or negative feelings. The primary factors attributed to lapse or relapse include overwhelming feelings such anger, anxiety, and depression. There appears to be an association between overwhelming feelings, associational cues with regression to prior patterns of use. More specifically, overwhelming feelings when paired with associational cues, either visual or olfactory, can interfere with the maintenance of abstinence. Inadequate coping skills, negative social support and poor motivation may increase the probability of regression to prior patterns of substance use. These statements point out the dynamic

interaction between perceived lack of support, low motivation, and overwhelming feelings. These factors appear to act synergistically and contribute to a return to prior patterns of substance use.

I didn't use for a about a month. I wanted to give it a try. I got into an argument with my father. I don't remember what it was about; the pressure of being with my family. I would look at my daughter and think I'm repeating what my sister did before me. I am still hurting behind the relationship.... My father and I got in an argument one Saturday night. I told my mother I would be back. I went out and smoked crack that lasted 16 months.

The circumstances have become unbearable.

Me and my girl had gotten into an argument It was about social things, communication wasn't working. . . . I was feeling a lot, I felt empty and alone.

I'd either get real happy or bored and mad.

I was barred from being able to let feelings out, identify them and deal with them.

I can't never deal with the pain well. I've never dealt with any pain. It just builds up into this huge volcano and when you get sober it erupts.

It's emotional stuff like anger, rage, strong emotions

... I wanted to get loaded because I didn't like the way I was feeling. I was feeling lonely, rejected and abandoned.

One of the times I went out I know that one of the issues I was into looking at was poverty, racism, that whole thing, and my anger around it. My inability to talk about that at meetings. There were no meetings where I could speak of it. There wasn't even a sponsor I could say that to

I notice a pattern that whenever I go through a divorce, a death, whatever, all the past hurts come up. The past abuse, the past hurts come up and they begin to become intense. That's what makes me use.

I didn't know how to deal with my feelings. Not knowing how to take care of myself

As things get real, and I had to look at who I was, at that point I needed to begin to accept who I was. I didn't have the ability to accept who. Too much anger... All of these feelings are there. There is a feeling of shame. For me its the end of the world. I am off and running.

Respondents observed that emotional intensities, emotional eruptions, and feelings like anger, rage, and fear were intolerable. As a result, there may be a strong desire to engage in substance use to control these feelings. Part of maintaining continuous abstinence demands not only acknowledging and identifying the issues, fears, and emotions but open discussion as well. Maintaining continuous abstinence involved learning effective means of handling dysphoric mood states, periods of emotional intensity and associational cues.

3. What are the perceived critical factors, if any, in the decision to maintain abstinence ?

Critical Factors to Maintaining Abstinence

Respondents were queried about factors critical to maintaining abstinence. Three categories were identified from the narratives. These categories were: (a) obtaining positive social support which may also be goal specific social support, (b) avoiding negative influences such as those who continue to use and/or glamorize the substance and the lifestyle and/or talk about substance use and trade or deal substances, and (c) analyzing cost and/or benefits of use (i.e.,

weighing the pros and cons).

Positive social support. The significance of obtaining positive social support is

expressed in the following:

Finding a community of people who support your sobriety. It can be meetings, church, an adopted family, people who support your sobriety and want to see you make it.

I have to be around people the vast majority of time [People who] have some insight that they've been through it themselves.

Respondents may be required, in order to maintain abstinence, to seek out positive social support. This translated into avoidance of some network members who were considered high risk.

Avoidance of associational cues, problems and barriers

Avoiding crucial people, places and things is an effective strategy for maintaining abstinence. Certain situations and environments may be high risk situations. Avoiding high risk or problematic situations may involve numerous

changes.

I can't let myself be around people who are selling drugs. I can't be around people who are taking them I look at their lives and I think, no thank you very much, you are a good commercial on why I don't want to be there again.

I can't go back to those people to those places.

I'm not waiting tables in a restaurant where everybody is an addict.

I have to not be walking around my neighborhood too much.

I had to move out of the Richmond. I had to change friends.

I gave up all of my friends. . . . they were all drug addicts. Not hang around with people who do it.

I can't be around people who are still using and talk about using

Respondents engaged in a cost benefit analysis when confronted, either directly or indirectly, with associational cues or the desire to use. Respondents engaged in self reflective dialogue about prior substance using behaviors, consequences, and outcomes. This self reflective dialogue called into the forefront past experiences related to substance use and motivations for initiating and maintaining abstinence which were measured against previous and potential losses. In essence, respondents were asking themselves what is to be gained and/or lost from substance use and does the potential benefit outweigh the potential loss ?

I have way too much to loose....

I can't do anything if I let myself get caught up in a drug that's all consuming.

I think it through. I don't want to loose what I have. I don't want to be out there on the streets. Maybe next time I get my teeth knocked out or somebody beats me half to death, or raped . . .

I have to remember that I had my time ... that's behind me now. It's like a pair of shoes that don't fit anymore. You don't keep trying to put them on. You just put them in your closet or throw them away.

I'm fighting for my life and whatever sacrifices I have made

Critical Factors

couldn't be too great.

I want to live. I don't want to die. I don't want to go to prison, I don't want to end up in a mental institution, I don't want to be on the streets, homeless bag lady or whatever.

I think recovery targets your substance abuse, targets your lifestyle, and targets the way you think. If your style of thinking is similar, it leaves the door open for your addiction to occur.

First abstinence then recovery comes when I make a conscious decision to change learned patterns.

Another respondent posited that maintaining abstinence entailed

the development of a repertoire of behaviors that the individual shifted between

between when confronted with triggers and negative influences.

Maintaining abstinence was facilitated by (a) a strong social support network that provided general social support and goal specific social support, (b) avoiding barriers and negative influences which involved skill development and coping, and (c) analyzing the pros and cons.

4. Are there differences between African Americans and Euro-Americans in the critical factors to initiating and/or maintaining abstinence and/or the perceived problems and barriers as identified in the respondents' narratives ?

There were no apparent differences in the essential structure of the decision to initiate abstinence, and/or the perceived critical factors for initiating or maintaining abstinence.

Chapter 5. Discussion

The orientation of this investigation was that of description and theme analysis which could generate a foundation for more extensive research. The purpose of this investigation was not to elucidate a chain of causality. There are no significant findings and no specific conclusions can be formulated. However, there are some hypotheses that can be drawn and used to guide further study. This chapter discusses the findings and their implications for further study and nursing practice. Initially there is a focus on the sample characteristics which are compared to national trends and findings as reported in the literature. This is followed by a discussion of the open ended data that focuses on critical factors to initiating and maintaining abstinence then problems and barriers. There may be some overlap between problems, barriers, and critical factors. There is an exploration of the theoretical implications of the concept of substantial *representation of color*. This is followed by a discussion of the significance of commonalties and similarities across identified factors and decision making processes. This section ends with the derivation of hypotheses for further investigation.

The design of this study utilized an ethnographic approach. I felt that what research had been done was not only inadequate but also inconclusive. Thus, a qualitative approach "could provide the grounding for more rigorously structured research" about the phenomena of interest (Munhall and Oiler 1986, p. 267). Findings are cautiously phrased to avoid inferring cause and effect. There are no conclusive findings.

Sample Characteristics

This sample has many features common to those reported in other studies examining cocaine related problems, treatment and outcome. Prior drug and alcohol use is characteristic of this sample. Adolescent substance use, in particular, early marijuana use, is a common phenomenon. Adams et al. (1987) show that the majority of those who have tried cocaine have tried marijuana as well. Age, and income are similar to national trends. Overall, the sample had a relatively short period of abstinence. Respondents report a multitude of negative consequences and effects, secondary to excessive cocaine use, that are not only reported in the clinical literature but are also associated with abusive patterns of cocaine use as well. The general trend reveals not only a pattern of multiple attempts to initiate abstinence but to maintain continuous abstinence.

Overall the sample profiles a group of people with poly-substance abuse, histories of both familial and adolescent substance abuse, preferential use of crack for African Americans or cocaine with heroin for Euro-Americans, less than a year of abstinence. Additionally, the profiles suggest a perception of general improvement with abstinence across employment, family relationships, health, and overall life satisfaction. African Americans are more likely to be single, prefer crack as the substance of choice, have a history of prior substance abuse treatments, less likely to have attained a high school diploma but have some vocational training, and more likely to live with dependent children.

Similarities across racial/ethnic groups include the choice of substance, beliefs about sobriety and abstinence which may reflect 12 step mutual support group participation, attendance at such support group meetings, and a belief that 12 step support groups do assist in the maintenance of abstinence. Although the sample is self selected, there are some surprising similarities to other samples.

National studies indicate that crack cocaine use is more common among African Americans and Hispanics in comparison to Euro- Americans (National Household survey data, revised, 1992) which was supported, at least for African Americans, here. Crack is overwhelmingly the primary method of cocaine use not only for African Americans in this sample but for other samples. There are some differences in age of initiation which differ from national trends. Early cocaine use, especially crack cocaine, is not uncommon in this sample which may reflect and highlight the issues of access and price. The fact that the majority of respondents report familial histories of substance use and substance related problems underscores the significance of families in transmitting patterns of behaviors to other families members. This finding also highlights the importance of family treatment as an adjunct to individual treatment.

Critical Factors for Initiating and/or Maintaining Abstinence

Although the factors responsible for initiating abstinence may be different from those for maintaining abstinence, they are discussed together. These factors are reported elsewhere in the literature. Family/significant others can be viewed as tools of intervention. Significant others may have strong social influence or coercive power that can be employed to sway the respondent's degree of commitment and willingness. This study identifies social support at a critical factor in initiation and maintenance of abstinence. Family/significant others may help to move respondents towards abstinence by increasing respondent awareness, and increasing perceived levels of distress/despair. Although it is proven from this study, there may be an interrelationship between the category of loss/separation and despair/distress. It is also possible that family/significant others can serve a protective function for respondent and aid in the maintenance of abstinence as well. Therefore it is important to complete an assessment of the social network composition .

Overwhelming emotions and feelings can either (a) persuade respondents to initiate abstinence and (b) can act to thwart the maintenance of continued abstinence. This appears to hold true for those respondents who lack the protection of a positive supportive social network. The protective functions of the social network can insulate respondents from associational cues and help to solidify commitment to maintaining abstinence. On the other hand, the social network can be a significant source of problems for the respondent by providing access to the substance of choice and undermining tenuous commitment and beliefs. The critical factors for maintaining abstinence involve finding positive social support, successful evaluation of the situation through an analysis of the pros and cons, and avoiding associational cues which includes specific people, places, and things. Maintaining abstinence involves the development of a parallel or perhaps, an alternative belief system, capable of sustaining motivation. The decision to pursue abstinence is the result of many interactive forces one of which may be the demands of the social network. Abstinence may involve numerous false starts and attempts. Although speculative, false starts and stops are argued to be analogous to adopting an *abstinence posture* undertaken to minimize distress or anxiety or to quell the demands of disgruntled significant others, employers or spouses.

The change in attitude represents an alteration in those cognitive processes that were once able to support substance abusive behaviors. The break down in the cognitive framework may be one of the necessary critical factors to initiating abstinence even if such abstinence is the product of posturing. There is evidence, both scientific and anecdotal, maintaining that the individual who still believes in the plausibility of continued use will have difficulty maintaining abstinence. Brown (1985) discusses the significance of reciprocal determinism as a critical interplay between behavior and cognition. Thus the maintenance of abstinence may depend on an alteration in the accompanying belief system. False starts and stops may help to shift the belief system.

Belief testing involves preconceived notions of acceptable versus unacceptable substance use. Preconceived notions and beliefs are important because they provide a grounding, a framework for respondents in which to evaluate behavior. In essence, respondents evaluate a set of beliefs that help to define the limits or boundaries of acceptable behavior. There is a repeated theme throughout the interviews regarding acceptable behavior. Determining whether or not substance use behavior is acceptable or unacceptable helps to move the respondent closer towards abstinence. Acceptable substance use does interfere with the meeting of responsibilities (i.e., school, work, and family roles) or societal expectations. Substance use behavior is unacceptable if (a) it comes to the attention of others (b) the person is unable to meet expectations or responsibilities or (c) the person is unable to fulfill identified roles. Appearing "under the influence" violates the rules of acceptable substance use. Rules of acceptable behavior seem to be primarily unspoken but provide respondents

with boundaries and reflect socially defined rules of substance use. These rules help to shape images of who is an addict or alcoholic, define addiction and dependence, determine what is acceptable substance use behavior, how to identify those whose behavior is outside the bounds of acceptability, and when to intervene.

Belief testing involves an evaluation of currently held personal notions of "addiction" compared with the individual's assessment of his/her own behavior and possibly the assessments of others. One of the primary lay beliefs is the notion that "addicts" cannot stop without formal intervention. Successful short term abstinence refutes this belief and may support continued substance use. The concept of an *abstinence posture* emerged from this investigation. It is conceptualized as an attitude taken to minimize or ward off threats, decrease or alleviate anxiety. It may involve a dimension of commitment and motivation. Although the outcome of committed and uncommitted positions of abstinence appear to be the same, the motivations may be drastically different.

Problems, Barriers as impediments to initiating and maintaining abstinence

Certain problems and barriers may interfere with initiating and maintaining abstinence: lack of social support, negative social support, and lack of goal specific social support. Associational cues act through yet unidentified mechanisms to increase despair/distress, minimize problem severity, undercut motivations, and provide substance access, ultimately sabotaging change and the maintenance of abstinence.

Hall et al. (1991a, 1991b) have identified significant relationships between

return to drug use and social support, coping and abstinence. Greater abstinence specific social support is correlated with higher rates of abstinence and decreased rates of relapse (Hall, 1991a, 1991b). This difference may best be explained through the articulation of the relationship of social support and coping. Social integration had a protective function for Euro-Americans but not for African Americans. The investigators report that the role of social support and its impact on behavior may be interpreted differently for African Americans than Euro-Americans. Perhaps *substantial representation of color* may enhance perceived social support for visible racial/ethnic minorities.

Emergent issues. Substantial representation of color may be related to what Bell (1990) terms cultural comfort. More specifically, cultural comfort implies the existence of a bond between individuals of like racial/ethnic groups because they may assume that they share some common experiential base. Cultural comfort may be facilitated by *substantial representation of color* and prompt discussions of sensitive racial or cultural issues, bonding and social support.

A condition for positive social support assumes an understanding of cultural and ethnic differences and how these differences may affect the lives of some respondents. One of the conditions for obtaining positive social support may be an increase in the degree of understanding facilitated by open discussion between and within groups. African Americans, as well as other newly abstinent respondents, must navigate the problems commonly encountered in maintaining abstinence. However, African Americans must also confront the painful realities of navigating racist institutions and organizations. Although initiating and maintaining abstinence may be the critical foundation, confronting and working through peripherally related issues that may have contributed to abusive patterns of substance use may be another key component to maintaining abstinence.

Participation in 12 step mutual support groups reflects the importance of such groups for the maintenance of abstinence, behavior change, and recovery. Identification with 12 step sobriety ideologies mandates that members accept powerlessness and ignore social differences among members which may be at odds with the efforts of African Americans seeking to erase their marginal status and associated powerlessness. Identity is a key component of 12 step mutual support groups. African Americans, who elect to participate in these support groups, must deal with the conflicts associated with macro level issues of racial disharmony which stress differences and uniqueness in opposition to sameness. Macro level conflicts discourage between group, interracial intimacy which may help to foster a sense of identity through positive social interaction, sharing of experiences and social support. Problems and barriers for African Americans may reflect the tensions of self: uniqueness/sameness, affiliation: intimacy/intimidation and wholeness: integrity/disintegration.

In the interim, for those African Americans participating in mutual 12 step support groups, the presence of other racial/ethnic minorities, which may be a dimension of the concept *substantial representation color*, may be an important source of social support that can facilitate successful navigation of problems and barriers that may interfere with the maintenance of abstinence. *Substantial representation of color* may facilitate feelings of sameness, intimacy, and integrity as expressed in Hall's (1992) theory in development regarding the alcohol

recovery related experiences of lesbian women.

Twelve step support groups are common, inexpensive and highly recognized as valuable adjuncts to formalized treatments. The primary criticism is that these program, like some formalized treatment programs, ignore ethno - specific influences and issues affecting the lives of racial/ethnic minorities. Philosophical traditions and program dogma does not encourage discussion of issues of race and racism within the confines of 12 step mutual support groups. These groups are becoming more diverse in racial/ethnic makeup but their tenets, as Hall (1992) asserts, retain the "trappings of white, male, Christian, middle class culture" (p. 193). Inevitably, issues pertinent to the lives of African Americans and other racial/ethnic minorities may either go unacknowledged or ineffectively addressed. African Americans with histories of cocaine related problems seeking support within the confines of traditional 12 step support groups may be gravely disillusioned. Treatment providers should encourage racial/ethnic minorities to organize support that addresses significant if not critical issues that impact on the maintenance of abstinence and ultimately individual and collective health. This investigation demands more in-depth study of those processes and sociocultural factors impinging on the process of recovery particularly for visible racial/ethnic minorities.

In summary, critical factors operate by hooking the individual's commitment to change by "reinforcing a state of cognitive dissonance between continued engagement in the behavior and one's personal beliefs, attitudes, values and feelings" (Marlatt and Baer, 1988, p. 239).

This investigation highlights the multitude of factors involved in the

complex, multidimensional process of recovery. Abstinence is a component of the recovery process. For African Americans and for other visible racial/ethnic minorities, the concept of *substantial representation of color* may hold promise for understanding the relationship of social support to abstinence and recovery.

Other constructs that may be related to initiating and maintaining abstinence include self-efficacy and locus of control. These constructs may help to explain the change from abusive patterns of substance use to abstinence. There are similarities and commonalties across racial/ethnic minorities and gender in the types of factors critical to initiating and/or maintaining abstinence. These factors are in constant interaction such that one set of factors may have more relevance at certain periods than others.

Decision process and change. This study describes, in part, the complex processes of decision making, the process of change, and the multitude of influences that shape and determine whether or not that change occurs (Janis and Mann, 1979; Orford, 1986; Prochaska and DiClemente, 1986). Prochaska and DiClemente (1986) argue that change is a stage oriented process. Successful change involves individual precontemplation of the issues and/or risks. It also involves appraising the challenges, or analyzing the pros and cons, moving on to contemplation which involves searching for alternatives that are acceptable, to action and maintenance. In the contemplation stage awareness is bolstered by an event and/or communication that challenges the behavior(s) in question. The individual appears to will evaluate the seriousness of the event and/or communication and decide either to ignore such or to opt for a different course of action which may be temporary. Depending on the degree of threat or arousal

coupled with past evidence, the course of action may represent an attempt to minimize the threat. Once the threat is decreased, the individual may regress to the previous course of behavior. As with many respondents in this investigation, there were numerous false starts and stops. Maintenance of abstinence could be traced to improved social support, success at avoiding high risk situations and associational cues, and analysis of the pros and cons. For African Americans, the maintenance of abstinence may, but not necessarily, require the expression of painful emotions associated with race and racism. This is, however, inconclusive.

The concept of an *abstinence posture* deserves further examination. Abstinence posture may involve a dimension of commitment and be related to motivation. In essence, individuals adopt an *abstinence posture* as a temporary measure to appease perceived powerful others, to minimize feelings of anxiety, distress and despair and for purposes of respite.

Racial/ethnic minorities must negotiate the problems of organizations and institutions whose policies reflect biases and partialities based on color. They must address issues of self esteem and identity that may challenge disparate views and the related problems of marginality. Hall (1992) argues that this is a crucial task facing visible racial/ethnic minorities seeking to alter abusive substance use patterns. In essence, this is not only the dilemma of the individual but of those health care providers attempting to assist that individual in negotiating necessary change.

Deriving hypotheses and questions for further study

Although there are some common sets of processes guiding the recovery

process, I make the assumption that (a) there are some differences as a function of gender, race and class such that women experience a process of recovery that is different from men; and that racial/ethnic minorities, who view their lives through the filter of race, have different contextual experience. I hypothesize that:

1. Critical factors for initiating abstinence for women are different than those for men.

2. Children are significant factors in a woman's decision to initiate abstinence in comparison to men.

3. African Americans are more likely to discuss issues of race and racism in the confines of 12 step mutual support groups if other visible minorities are present.

4. Substantial representation of color (i.e., the proportion of like visible racial and ethnic minorities present) is crucial to the disclosure of racially sensitive issues in interracial settings.

Limitations of the Findings

Limitations of the method, in particular, the sampling technique, the instruments, namely, the semi-structured interview, and the threats common to self reported data constitute the most salient concerns in this dissertation. Biernacki and Waldorf (1981) discuss the inherent limitations of snowball sampling procedures. The most salient limitation of the sampling method was locating respondents meeting the criteria for participation and assuring that the data were not only acceptable but valid. Use of a semi-structured interview as a data collection technique poses several threats to validity. Hutchinson and

Wilson (1992) argue that "valid interview data are those that accurately portray what the investigator is attempting to study" (p. 117). Problems of irrelevant or tangential questions may interfere with obtaining valid data. Question sequencing, too, may interfere with obtaining sensitive data. Although the pilot study identified potential problem areas and areas of confusion, interview length may have threatened the validity of the data. Question length may have encouraged respondent and/or interviewer fatigue and or disinterest thus hampering the validity and quality of the data. Initially, I attempted to establish a relationship with the respondents by actively listening, expressing empathy, and allowing for emotional catharsis.

The use of self reported data is associated with several common threats. Self-reported data bring with them the opportunity for denial, rationalization, and various other subjective distortions. Wells, Hawkins and Catalono (1988) argue that retrospective self-reported data of drug use should extend to no longer than six months since the accuracy of "retrospective reports over extended periods of time" is in question (p. 877). I felt that since the primary purpose was not to document the quantity of drugs used but to ascertain those factors critical to initiating and maintaining abstinence, retrospective and self reported data posed limited threats to validity.

Every attempt was made to provide a system of checks and balances during data collection by asking similar questions throughout the course of the interview. The possibility of social desirability is extremely significant as a threat to validity. It is well known that questions about alcohol and drug use and sexual behavior are perceived as threatening. Techniques like embedding were used to minimize social desirability (Sudman and Bradburn, 1982). Every attempt was made to minimize experimenter demand characteristics and Hawthorne effects (Iverson-Shelley, 1984).

Other salient threats to the data relate to the choice of design. The collection of data at one point in time may result in the loss of valuable information about the nature of intra-individual change. If the purpose of the investigation was to elucidate a chain of causality then a repeated measures design would enhance the predictive validity of the findings allowing for more in-depth causal analysis. This investigation does not claim representativeness or generalizability of findings. Individuals who elect to participate in this investigation may be inherently different from those electing not to participate. The sample is self selected. The comparison of this sample with national samples must be cautiously made.

The possibility other patterns of abstinence exists (paths into abstinence and critical factors not identified here) are also noted. (Sobell and Sobell, 1978; Valliant, 1985). Those who participate in 12 step mutual support groups such as alcoholics anonymous, cocaine anonymous and narcotics anonymous may experience a process of change that is a function of that participation and group socialization processes. It is difficult to weed out the intricate relationships that are often confounded with the study of race. The interaction of factors like class, norms and values can account for the findings or lack of findings reported. However, the findings of this investigation point to areas that mandate further exploration with larger samples, more precise measurement methods, and well developed structured questionnaires. The lack of other tangential or emergent

issues like sexism, sexual and or spousal abuse and incest, to name a few, must be explored. This may be addressed through more rigorous theoretical sampling to explore these avenues.

Implications for nursing

Pflum (1990) estimates that there are 10 to 15 million substance dependent individuals in the United States. "Therefore the lives of 40-60 billion have been touched" (p. 4). Milieu variability and role flexibility place the nurse in direct contact with substance abusing and/or addicted client systems. The nurse is covertly drawn into the users' network and culture but without any significant understanding of the antecedent and consequent factors involved in maintaining individuals' problematic substance abuse can do little to move the individual or the system towards health.

Unfortunately, the attention given to substance related problems does not reflect the complexity of client needs. The complexity of needs overshadows and exceeds prevailing nursing knowledge and skill particularly as related to the care of special aggregates. The epidemics of cocaine addicted infants, compromised family systems and HIV related illness reflects the complexity of needs. This is a stimulus to research and program development. This investigation is an outgrowth of that expressed need. Understanding ethnospecific responses to problems is important given changing populations demographics and the diversity of nursing work environments. Race has played and continues to play key roles in shaping the lives of African Americans. It is important to understand the subtle nuances that may explain differential patterns of health outcomes across racial/ethnic groups.

Nursing curricula must address culture as a significant factor in the lives of racial/ethnic minorities. It is imperative to recognize that collective and individual views of the social, political and economic environments are shaped, in part, by the groups of people with whom individuals interact. This perspective, a social interactionist perspective, demands that we must not only, as individuals, but as a collective humane society examine the conditions of peoples' lives, or the structures of society and the health care system that contribute to the continuing existence of some of the problems"(Lynam, 1992, p. 150). One of the ways that this can be accomplished is through understanding the "lived experience". Only by asking questions specific to the experiential base of visible racial/ethnic minorities can we begin to understand the contextual dimensions and impact of race and culture. On a macro level, our societal institutions can't help but fail us if they do not seek to provide culturally sensitive services that recognize, particularly in the case of African Americans and other visible racial/ethnic minorities, issues of race, racism, identity and social marginality. A commitment to cross cultural research will enhance our understanding of how culture and race influence human behavior. This is a fruitful endeavor for nursing research.

Recommendations for Future Research

Research priorities stress the need for interdisciplinary research with a cross cultural focus. Interdisciplinary research endeavors provide a system of checks and balances. Different disciplines bring forth different explanations for the occurrence of a phenomenon and different methods for exploring the phenomenon. This approach to the study of human existence creates multiple

hypotheses which can then be tested against one and other. This approach helps avoid mono-operational biases. Research endeavors must begin to expand on current conceptual knowledge and theory development particularly related to the concept of recovery and its relationship to health if any.

Hall (1992) explains that recovery is a multidimensional phenomenon that may include personal growth, struggles with other compulsive behaviors, reclaiming the self, connection and reconnecting, cyclical/celebratory, vocational change, empowerment and transition. In essence, recovery is all encompassing. Further research should begin to ask what are the essential components of substance abuse recovery, are these components specific to stages or phases ? and is there a common process that can be discovered and that addresses change over a variety of problematic behaviors ?

Unfortunately, this investigation raises more important questions for further study than it answers. Prospective designs that utilize a case study method to examine decision processes, moderating factors, and the use of multiple corroborative data sources to enhance self reported data may prove beneficial to enhancing methodological rigor and validity. The examination of concepts such as *abstinence posture* and *substantial representation of color* deserve more intensive study. Finally, investigations must somehow account both theoretically and empirically for change in the impact of variables on outcomes of interest over time. Path analysis or cox regression models may prove fruitful for elucidating a chain of causality. The issue of process may best explain variations, both individually and collectively, in behavior change as it relates to substance abuse recovery and abstinence.

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Appendix A

QUESTIONNAIRE

Some of these questions will ask you to explain or describe your response. Please feel free to utilize the back pages if you require more space to complete your answer. There are no right or wrong answers to any of these questions. All information that you give is confidential. Thank you very much

- 1. What is your date of Birth_____
- 2. What is today's date_____
- 3. Sex M() F()
- 4. Do you racially identify with (please mark an X next to your selection)
 - () African American
 - () Caucasian
- 5. What is your religious orientation
 - 01() Baptist
 - 02() Lutheran
 - 03() Methodist
 - 04() Episcopalian
 - 05() Catholic
 - 06() None
 - 07() Other
- 6. What is your current Marital Status
 - 01() Single never married
 - 02() Single, living together with partner
 - 03() Married
 - 04() Widowed
 - 05() Divorced
 - 06() Separated

IF YOU CHECKED EITHER 1 OR 2 IN QUESTION #6 THEN SKIP TO QUESTION #10

- 7. How many times have you been married
 - 01()1 time only
 - 02()2 times
 - 03()3 times or more
- 8. How many times have you been divorced
 - 01()1 time only
 - 02()2 times
 - 03()3 times or more

- 9. How many times have you been widowed
 - 01()1 time only
 - 02()2 times
 - 03()3 times or more
- 10. Education
- A. How many years of schooling you have completed ____
- B. What is the highest degree you have obtained____
- C. Besides what you have noted about the number of years of schooling completed, have you attended any other kind of school like a vocational school Y_____ N____
 - C1. if you answered Yes to C above please mark the statement that describes your main area of vocational training.
 - () Business, office work
 - () Allied Health, Nursing
 - () Trades and crafts (mechanic, electrician)
 - () Engineering or science technician (draftsperson, computer programming)
 - () Other (please specify)_
- 11. Current Employment Status
 - 01() Employed full time
 - 02() Employed part time
 - 03() Retired
 - 04() Disabled temporarily
 - 05() under the table
 - 06() attending school full time
 - 07() attending school part time
 - 08() volunteer work
 - 09() disabled permanently
 - 10() unemployed

12. If not currently working, how many months have you been unemployed_____

13. Use the following list to choose the option most closely resembling, your usual occupation, your father's usual occupation and your mother's usual occupation:

- A. Your usual occupation ()
- B. Your Father's usual occupation ()
- C. Your Mother's usual occupation ()
- 1. homemaker
- 2. domestic worker (car washer, deck hand, cafeteria, worker)
- 3 bartender, bus/truck driver, assembly worker
- 4. machinist, small business owner, butcher, mechanic
- 5. bank clerk, teller, bookkeeper, typist, sales, shipping
- 6. administrative assistant, law enforcement officer
- 7. sale/office director, accountant, military officer, social worker, teacher, computer technician
- 8. physician/doctor, nurse, lawyer, executive

111 9. Student 10. other (please specify) _____ 11. unknown 14. What is your average income per month before taxes_ please check all sources that apply () paycheck ()SSI () service related disability () other pension () unemployment insurance () savings () investment income () family support () other () SSPI/SSA ()GA () VA pension 15. What is your current living situation A. Are you currently homeless (Consider yourself homeless if you are not paying rent and do not own your own home) Y____ N__ B. If homeless for how many months_____ C. What kind of dwelling do you currently living in (Check One) () half way house () house () apartment () other (specify) _ 16. With who are you currently living with () spouse () mother () father () grown children () dependent children () friends () others () alone () other (specify) 17. Do the people that you live with use drugs? Y_____ N_____ 18. Do they use alcohol Y____ N____

19. Legal history Total number of arrests
() 0-1
() 2-3
() 3-4
() 4-5

() 5 or more

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- A. Check all that apply
- () Driving under the influence
- () Sales or possession arrest
- () disorderly conduct
- () public drunkenness
- () assault
- () burglary/theft

B. Are you currently on parole or probation Y____ N____

B1. If you answered yes to #24, Please specify the offense

20. Drug history

A. How long would you estimate that drugs was a problem for you before you stopped using.

- () 0-1 years
- () 1-2 years
- () 2-3 years
- () 3-4 years
- () **4-5** years
- () 5 years or more

B. How long would you estimate that alcohol was a problem for you before you stopped using. () 0-1 years

- () 1-2 years
- () 2-3 years
- () 3-4 years
- () 3 4 years
- () 4-5 years
- () 5 years or more

Please complete the following items for the drugs you used (please list your preferred or favorite drug first)

For our purposes consider the words preferred and favorite to mean the drug you like to use the most)

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favorite drug
D. Drug #2 (Name)
Usual way you took the drug
() snorted
() oral
() injected
() smoked year of first use of this drug
average number of days a week in which you used this drug
average number of days a week in which you used hus drug
21. When was your last drink (month/year)
22. When was your last drug use(month/year)
23. What is the longest that you have been abstinent in months
24. from (month/year) to (month/year)
25. Please check which of the following have occurred:
When using your favorite drug When not using your favorite drug
suicidal thoughts () ()
suicide attempt () ()
hitting your spouse()()hitting your child()()breaking things()()
hitting your child () ()
breaking things () ()
bar fights () ()
loud arguments () () irritability () ()
hallucinations () ()
racing thoughts () ()
depression () ()
other () ()
26. Did you take drugs or alcohol as a teenager Y N
if you answered Yes to the #26 please answer A & B. If you answered no then skip to question #27
A. What age did you start smoking marijuana 01 () 7 - 9 years 02 ()10- 12 years

- 03 ()13 -15 years
- 04 ()16 -18 years

A1. How often did you smoke marijuana as a teenager

- 01() once a week
- 02() two to three times a week
- 03() four to six times a week

04() more than seven times a week

B. How old were you when you first drinking liquor or beer

01() 7-9 years

02() 10-12 years

03()13 -15 years

04() 16 -18 years

- B1. How often did you drink liquor or beer
- 01() once a week
- 02() two to three times a week

03() four to six times a week

04() more than seven times a week

27. Have you ever received treatment for your alcohol or drug abuse Y____ N____ How many times have you received treatment

()1-2

()2-3

()3-4

()4-5

() 5 or more

28. What is the most recent date of treatment (month/year)_

A. what is the name of the treatment program/facility and location

Some treatment programs and facilities encourage individuals to participate in 12 step programs. For our purposes 12 step programs are defined as Alcoholic Anonymous (AA) or programs based on A.A. philosophy such as Narcotics Anonymous (NA) and Cocaine Anonymous (CA).

29. Do you participate in AA, NA or CA . Participation is defined as attending meetings Y_____ N_____

A. How often do you participate

- 01() once weekly
- 02() twice weekly
- 03() three time a week
- 04() four or more times a week

B. What is the single most important characteristic that you like the most about the 12 step meetings that you attend (please specify)

C. Think carefully and tell me if you **agree or disagree** with the following statement. C1. Twelve step programs work better for Caucasians than they do for

- African Americans.
 - 01() Agree
 - 02() Disagree

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- 30. Do you see a therapist, psychiatrist or counselor now Y____ N____
- A. How long have you been seeing this person _____
- B. When did you first see this person_
- C. How often do you see your therapist, psychiatrist or counselor_____
- 31. Do you currently have any of the following
- () insomnia
- () difficulty relaxing
- () irritability
- () mood swings
- () weight loss
- () sexual problems
- () trouble concentrating
- () weight gain
- () violent thoughts
- () oversleeping
- () trouble remembering
- () racing thoughts
- () loss of appetite
- () sexual anxiety
- () suicidal thoughts
- () excessive gambling or money spending
- () headaches
- () drug cravings
- () alcohol cravings

A. Have you experienced other disorders or symptoms since you became abstinent (If yes then please explain______

B. have you experienced periods of depression since you have stopped using Y___ N____

B1. If yes how long after you became abstinent

- () 1-2 months
- () 2-3 months
- () 3-4 months
- () 4-5 months
- () 5 months are more

31. Sometimes individuals report that abstinence involves a variety of changes Since becoming abstinent have you experienced what you consider to be major events or changes in your life Y_{----} N_____

A. If yes, list the single most important change that you have experienced______

32. In gener	al how wou	ld you describe your abstiner	nce to date would	you say it has been
easy	Fairly easy	difficult	fairly difficult	very difficult

Please explain your response

33. Did any of your family members abuse drugs and/or alcohol. For our purposes let us consider "Family member" to include brothers, sisters, parents, and grandparents. Y____ N____ A. if yes please indicate who 01() sister 02() brother 03() mother 04() father 05() fathers parents 06() mothers parents Below are ten questions that ask you to mark an X next to the word that describes how you felt when using your favorite drug and how you feel since you have stopped using your favorite drug. Please read each statement carefully. 34A. When I was using my Health was poor() Fair () good() excellent() Β. When I was using my family relationships where poor() Fair () good() excellent () When I was using my job satisfaction was С. poor() Fair () good() excellent () When I was using my job performance was D. Fair () good() excellent() poor() When I was using my overall satisfaction with life was Ε. poor() Fair () good() excellent() F. Since I have quit using my health is Fair () good() poor() excellent () G. Since I have quit using my family relationships are poor() Fair () good() excellent () H. Since I have quit using my job satisfaction is poor() Fair () good() excellent() I. Since I have quit using my job performance is poor() Fair () good() excellent () J. Since I have quit using my overall satisfaction with life is good() poor() Fair () excellent()

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The following are a list of statements with which you may agree or disagree. Please read each statement and think carefully. Tell me whether you agree or disagree. There are no right or wrong answers.

- 35A. Sobriety is more than not using or drinking
 - 01()agree
 - 02() disagree
- B. Abstinence is the only criteria for being sober
 - 01() agree
 - 02() disagree
- C. One is considered abstinent if he or she stops using his or her favorite drug 01() agree 02() disagree
- D. Some groups of people like racial and ethnic minorities are more likely to use drugs and or alcohol.
 - 01() agree
 - 02() disagree
- 42. Is there anything of else that you would like to include that may not have been covered

Section II

1. Describe briefly your alcohol and or drug use; what was it like. Who, What, Where, When, and How often

2. What was your favorite drug. (some people like certain drugs for certain reasons. What was the single most important reason that for you).

3. List the other drugs you have taken:

4. What problems did drugs or alcohol cause in your life

5. What problems do you have in your life today

- 6. What would you consider to be the critical factors in your decision to become abstinent A. (Why did you stop using) Tell me what happened).
 - B. Did you ever try to stop before

7. What do you consider to be the major problems you faced in achieving abstinence? When you tried to stop before what would happen

8. What problems do you face NOW in maintaining your abstinence? Do you have the same influences or factors in your life today?

9. Why do you stay abstinent?

- 10. Who are what people have been most influential in your decision to attempt abstinence? A.. Please explain how this person was helpful
- 12. What adjustments have you had to make since becoming abstinent ?
- 13. Do you think that recovery is more difficult for some individuals than for others?
 - A. Tell me what kinds of people

B. Please think carefully Given who you are, your sex, your race, your age, your legal and medical history, your living situation, your social support, your education and income; Do you believe that you will have difficulty maintaining your abstinence over the next year ?

- c Please explain your response
- 14. Please list the three most important things that you do to stay abstinent
- 15. Please define in your own words the term sobriety
- 16. Please define in your own words the term recovery

17. Is there anything of else that you would like to include that may not have been covered

Appendix B

CHR NO. 944602-04A UNIVERSITY OF CALIFORNIA, SAN FRANCISCO

CONSENT TO ACT AS A RESEARCH SUBJECT

A. PURPOSE AND BACKGROUND

Dr. Patricia R. Underwood and Lucretia A. Bolin, RNC., MSN are studying cocaine problems and recovery from substance abuse problems. I have been asked to participate in this study because I may have knowledge about the strategies for achieving abstinence from cocaine.

B. PROCEDURES

As a research subject

1. I will give my permission to participate in the study.

2. I will agree to complete a questionnaire during a private and prearranged time. I will also agree to answer questions about my drug use and abstinence related experiences. I understand that the answers to these questions will be tape recorded. The actual time of participation should not exceed two hours.

3. I agree to participate in a face to face taped interview at which time I will be asked questions about my past cocaine use, what I perceive to be the critical factors in my decision to initiate abstinence from cocaine, what I perceive to have been the consequences of my cocaine and other drug use, what I perceive to be the barriers to either initiating or maintaining continued abstinence and social support relationships, treatment experiences and treatment.

The questionnaire and the face to face taped interview will be completed in an agreed upon location by myself and the co-investigator, Lucretia A. Bolin, RNC., MSN.

C. Risk and Discomforts

1. Some of the questions may make me uncomfortable but I am free to decline to answer any questions I do not wish to or to decline participation in the study at any time.

2. Confidentiality: Participation in research may result in a loss of confidentiality. However, every attempt will be made to maintain and insure subject confidentiality. All identities in the study will be coded, that is, the names of the participants will not be used but assigned a code and this information will be kept as confidential as possible. Taped data will be transcribed and

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coded for analysis. All data files and tapes will be kept under lock and key by the co-investigator. After the study has been completed all data files and tapes will be destroyed.

D. BENEFITS

Although I may not benefit directly from participation in this study, It may help those who struggle with attempts to achieve abstinence from cocaine.

E. ALTERNATIVES

I am free to choose not to participate in this study. My participation is voluntary and I may withdraw from the study at any time.

F. COSTS

There will be no costs to me as a result of taking part in this study.

G. QUESTIONS

I have talked to ________ about this study, and have had my questions answered. If I have any further questions about this study, I may call the principal investigator Dr. Patricia R. Underwood at (415) 476-4172 or the co-investigator Lucretia A. Bolin, RNC., MSN, at (415) 431-7602.

If I have any questions or comments about participation in this study, I should first contact the coinvestigator. If for some reason I do not wish to do this, I may contact the UCSF Committee on Human Research, which is concerned with the protection of volunteers in research projects. I may reach the committee office between 8 a.m. and 5 p.m., Monday through Friday by calling (415) 476-1814, or by writing: Committee on Human Research/LTS Ste. #11 University of California, San Francisco, San Francisco, California 94143.

H. I have been given a copy of this consent form to keep. Participation in research is voluntary. I have the right to decline to participate or to withdraw at any time from this study.

SIGNATURE (SUBJECT)	
DATE	
SIGNATURE (WITNESS)	
DATE	

PERSON OBTAINING CONSENT_____

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